

California State Journal of Medicine.

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IMPORTANT NOTICE 1

Notify the office promptly of any change of address, in order that mailing list and addresses in the Register may be corrected.

SEPTEMBER, 1904.

THE NEXT A. M. A. MEETING.

The next meeting of the A. M. A. will be held at Portland, Oregon, July 11-14, 1905. Applications for membership may be secured at the office of the Society, Room 1, Y. M. C. A. Building, San Francisco.

EDITORIAL NOTES.

The Royal Commission which has been investigating the relation between human and bovine tuberculosis for the past three years has recently made a partial report. The commission finds that animals infected with tuberculosis derived from man exhibit no gross or histological differences in pathology, nor any perceptible variation in clinical effects from those animals inoculated with bovine tuberculosis. This is contra to the theory advanced by Koch and supported by some observers, and is of importance. Its direct bearing on the milk question cannot be gainsaid, and there should be no modification of the existing legislative restrictions in regard to cattle afflicted with tuberculosis; rather they should be increased and more rigidly carried out. A final report has not yet been handed in by the commission, but there is no reason to believe that the completed work of that body will materially differ from or contradict this preliminary utterance. All cattle in or near communities of men, and especially all cattle on milk ranches and dairies, should be carefully inspected, and at sufficiently frequent intervals.

Two pretty strong lay publications—*The Ladies' Home Journal* and *Everybody's Magazine*—agree with the STATE

ADVERTISING "PROMOTES."

JOURNAL OF MEDICINE in believing that to advertise a thing is to "promote its use," and acknowledge that admitting quack-medicine "ads" to their advertising pages would help to swindle their readers and profit the nostrum men. It is certainly unfortunate that some, or rather most medical journals, cannot appreciate the truth of the argument and realize their absurd and undignified course. They claim virtue for their reading pages, but admit their advertising pages to profitable prostitution. Even official organs and journals "owned, controlled and published" by the medical profession are doing the same disgraceful thing. It is a great shock, for instance, to see *American Medicine* "promoting the use" of Fig Syrup by giving it a whole page of space in a journal that is "founded, owned and controlled by the Medical Profession of America!"

In May, *Everybody's Magazine* launched a rather widely advertised campaign against nostrum advertising. A few pages

LAY SPASM IN ADVERTISING.

of quack medicine "ads" were dropped and several thousand letters were written to doctors and medical journals, calling attention to the fact. We were strongly tempted to comment on this at the time, but decided to wait and see what happened. Shortly after *Everybody's* gun was fired, the *Ladies' Home Journal* got the range and loosed a highly explosive shell; the article on "Patent Medicines" has been widely copied. Unfortunately for the Curtis Publishing Co., Mr. Bok, in his article in the *Ladies' Home Journal*, chose for special attack one of the very few, if, indeed, not the only one of the host of "nostrums" which probably does not contain any alcohol. This particular one is, we believe, made by a process suggested some fifteen years or so ago by Prof. Hallberg; the alcohol with which the vegetable principles are extracted is replaced by glycerin. Thus was the strength of Mr. Bok's attack very greatly weakened, for his paper was promptly sued for \$200,000, and he was compelled to retract, editorially, in a subsequent number of his journal. He might have said all that he did say, about any one of the nostrums in the table published and which we have reprinted, and been perfectly safe. It is an illustration of a very unfortunate blunder.

In the case of *Everybody's Magazine*, the spasm of virtue was more apparent than real. It is true that they did drop some "EVERYBODY'S" pretty rank "ads," and for that much they deserve credit. But in their circular letter they say: "We decline to carry any patent medicine or other fraudulent and otherwise objectionable advertise-

ments in our magazine." Dr. Frank C. Todd of Minneapolis called the attention of the publishers to the fact that they were not living up to the claim set forth in their letter, inasmuch as they published the advertisements of such things as "Dent's toothache gum," "Hessler's hair restorer," and the "Morley artificial eardrum," which is claimed to help every case of deafness. We cannot do better than quote Dr. Todd's own letter:

It is hardly necessary for me to point out that by eliminating many quack advertisements and making the claim that you "decline to carry *any* patent medicine or other fraudulent and otherwise objectionable advertisements," you are doing more harm than a magazine containing many such fraudulent advertisements, but making no claim to decency, because many readers will be led to believe that those which you do publish are trustworthy. Such being the case, these fortunate few advertisers should be able to pay well for such consideration. While in your first letter you stated that you declined to carry "any patent medicine or other fraudulent advertisements," in your last you admit your claim to be a myth. but think you should be considered upright because you carry less than some other magazines—on the principle that it is less criminal to steal \$1,000 than to steal \$5,000.

Closely following the action of the two lay journals already mentioned, came the rumor that the United States, through the Postoffice Department, was about to do wonders by excluding publications carrying nostrum advertisements, from second-class privileges. There seems to be but little doubt that the Postal Department has full legal right to take such action, if it may; but, knowing the tremendous influence of the nostrum makers, we decided to wait and see just about how much real meat might be found in this particular egg. As we suspected, a microscope will be quite useful to anyone seeking the "meat." If a citizen complains that an advertised medicine is a fraud or its advertising statements are obscene, it will (perhaps) be investigated. If the claim of obscenity or fraud shall be substantiated, publishers will be notified that if they print the "ad." their publications cannot be taken as second-class matter. Thus far the energy of the Postoffice has been devoted to the investigation of tuberculosis and lost manhood "cures." It is extremely doubtful that the alcohol "cures," which contain from 20 to 40 per cent of alcohol, will ever be molested by a lobby-ridden paternal government!

Dr. Hideyo Noguchi, who since leaving this country and his work with Prof. Flexner has been doing research work in Copenhagen, writes to Dr. Weir Mitchell under date of April 27th, giving an outline of his results.*

A goat was immunized against rattlesnake venom by continued injections over a period of several

months. Experiments on guinea-pigs then showed that the serum from this goat would prevent death from *Crotalus* venom even when twelve times the normal lethal dose of venom had been administered to the pig. Three hours after the administration of two killing doses, animals become critically ill, and will die in about thirty minutes if the serum is not employed; the injection of four cc. of the serum ensures the recovery of the animal, and no symptoms are apparent after two days. As a result of his work with Prof. Flexner, and more recently abroad, where he is working under a grant from the Carnegie Institution, he is entirely convinced of the falseness of the claims of Calmette, to the effect that his antivenin, produced as an immunizing serum against the venom of the cobra, is protective against the bite of all venomous serpents. The results of his work are certainly of great interest, and other communications from Dr. Noguchi will be looked for with anticipation of still further advances in our knowledge of the subject under investigation.

A milk supply protected only by a required standard based on chemical analysis, fat percentage, etc., may be not only filthy but also very dangerous. The bacterial content of an average sample is really the only safe indication of the quality of milk; of course assuming that no preservative has been added. That milk and cream containing comparatively small numbers of bacteria can be supplied commercially has already been sufficiently well demonstrated in New York and New Jersey. Time and again it has been shown that the average bacterial content of milk as ordinarily produced and marketed in cities is well over 1,000,000 per cc., often exceeding and generally equalling the bacterial content of sewage. The Boston Board of Health has recently established a bacterial standard and provided for the condemnation of milk or cream found to contain more than 500,000 bacteria per cc. This limit is certainly high enough, and there is grave question as to whether it should not be decreased by 200,000.

A nurse at the Marine Hospital in San Francisco accidentally gave a patient bichlorid of mercury, and the patient died. A police judge held the nurse in heavy bonds. Subsequently the matter came before Dr. Leland, the Coroner of San Francisco, and he took occasion to pass a few compliments to the police judges for the manner in which they fail to support the law in the case of rich or "influential" citizens, but get industriously after one who is without coin or "influence." These are merely the facts. The *San Francisco Chronicle* in its issue for August 6th, commented editorially on

* Univ. Penna. Medical Bulletin, July-Aug.

the remarks of Dr. Leland, praising his attitude, and, with him, condemning the police judges. One of Dr. Leland's statements, quoted by the *Chronicle*, is: "The Police Courts do not attack in this way those who perform criminal operations with the worst of motives." No one will dispute that fact, nor will he fail to recognize the fact that the abortionist, the performer of "criminal operations for the worst of motives," is one of the hardest of criminals to convict, largely because he generally has plenty of "influence." Part, at least, of his influence is derived from the support which he receives from the daily press, and incidentally the very daily paper which editorially condemns the police courts for not doing their duty! The same issue of the *Chronicle* contains, of course on another page, the following choice morsels for the delectation of the mothers and daughters and sisters in the homes which it enters: "Ladies who are in trouble or suffering from irregularities or suppressions. . . I positively guarantee immediate relief from irregularities from whatever cause. . . Dr. White." "Ladies suffering from irregularities. . . Immediate relief from irregularities from whatever cause. . . Dr. Sylvester." (We are advised that this man holds a license to practice, under another name.) And so on, for nearly half a column!

The great value of having a card record or index of every physician in the state needs no explanation. It is practically an absolute essential to the proper publication of the annual Register and Directory of Physicians. Also, it is necessary in order to keep track of the physicians of the state as they move from place to place. It is gratifying to report that the vast majority of the members of the Society and physicians of the state generally seem to appreciate this fact, and have promptly sent back to us the blank cards which have been mailed to them from this office. Some few, however, do not seem to apprehend that this is a matter of sober, serious business, and have been so childish as to make trivial, pert or impudent comments on their cards, or have failed to give the information desired. The Publication Committee is considering the advisability of publishing such comments in the Register, though a decision has not yet been reached. If you have received your card and have not yet returned it, please do so AT ONCE; if you have not received a card, please advise us AT ONCE. If you have any criticism, comment or philosophical dissertation to make, please make it in a letter and not on the card. The Publication Committee will most emphatically NOT be responsible for any errors or omissions in the Register unless the correct information is on file on the regular form card, in this office.

Some time ago a member of the Society living in the southern part of the state was victimized by a man who purported to be an agent of P. Blakiston's Son & Co., medical book publishers. He took an order for Da Costa's blood examination, filled out a receipt on a regular blank of the publishing house, received \$5.00 for which he receipted on the blank, and departed. Time went by and no book having been received, the doctor wrote to the house to know why. In reply they wrote: "Sam Wright does not work for us, and has never been employed directly by us; he was employed at one time by a man who was manager of our subscription department; afterward, he worked for Knight & Brown of New York City; we think at present he is engaged with Edward Bronson, San Francisco. While these people all handle our books, we are not responsible for the actions of their agents." It certainly seems a rather peculiar thing to deny all responsibility for the acts of a man though employed not by the house, but by the manager of the subscription department of the house! There is apparently some subtle distinction to be drawn which is not apparent to the ordinary individual. However, the lesson is plain; do not pay money to anyone representing himself to be connected with the house of P. Blakiston's Son & Co.

The Board of Examiners has announced that it will no longer undertake the work of prosecuting illegal practitioners, and it becomes the duty of county medical societies to take up that task. The board will direct its energies, in future, to seeing that the letter of the law is followed and lived up to in the matter of credentials. Just before the last examination the credentials committee of the board discovered that almost if not all the medical schools in California had issued diplomas to one or more students who had not remained in school the requisite time—not less than six months in each of four separate years. Doubtless in all these cases the error was one of oversight and not one of direct intentional commission; yet the law was not complied with. In one instance (the Hahnemann Medical College) a complication of this sort arose through the change in date of the commencement of the annual course. Up to October, 1903, the course began in May and ended in October; that year it was changed to conform with most other schools, beginning in October and ending in June. The step was taken only after advice with the New York State University Regents and the Illinois State Board of Health. Unfortunately, the first course under the new time schedule ended in June, 1904, instead of running to July, so that all of the students (with one or two exceptions) are affected. The law requires that four courses of not less

THE CARD REGISTER.

EXAMINERS AND THE LAW.

than six months each in four separate years shall have been taken before a diploma, which is a requisite credential for admission to the examination before the board, may be issued.

The term of study of all but one of the graduates of the Hahnemann Medical College, ending in June of the present year, was a few weeks short of the legally required time. When this matter was presented by the credentials committee of the Board of Examiners to the dean of that school, he at once saw the desirability of maintaining the integrity of the law. All of the students of that institution to whom diplomas have been granted for this last term will be required to re-enter the school in October and study till December, when they will be granted new diplomas, and will be eligible to appear before the Board of Examiners at the succeeding examination. There was no plea for leniency; no request that the law be ignored "just this one time"; no desire to evade the issue. The decision was immediate and clean-cut; the law should be lived up to. We are certainly to be congratulated upon this wise decision, for it leaves no ground for complaint by any school at any time that in any single instance the medical practice act was ignored or set aside. The other medical schools in which individual instances of a somewhat too short term of study have occurred can but follow the example which they have been set without grumbling, and live up to the wise letter of the wise law.

Dr. Oliver T. Osborne, Chairman of the Section of Materia Medica, etc., of the A. M. A., made the subject of his address at the Atlantic City meeting a discussion of nostrums and unlicensed or illegal practitioners. It was an excellent address, and was published in the *Journal A. M. A.*, July 2, 1904. That of it which had to do with nostrums was entirely devoted to the, popularly called, "patent medicines," and ignored the most dangerous class—the nostrums vended through the physicians of the country—the secret-formula "proprietary" preparations. Elsewhere in the *JOURNAL* will be found an extract from *Printers' Ink*, a publication devoted to advertisers and their interests. Read it carefully and then stop and think whether you are being "worked" in this way. Think whether you are doing all of your duty, or whether you are lazily going through life prescribing "ready-to-take-medicine" in the original package. The same number of the *Journal A. M. A.* which reprinted a portion of the article from *Printers' Ink*, contained, among other advertisements, some of them irreproachable, the following choice collection; it may be that the composition of some of the stuff here presented for the consideration and

use of reputable physicians, is known; if so, we should like to know it: Listerine, Colden's Liquid Beef Tonic, Iodomuth (seems to be good for most everything), Urasol, Thigenol, Vasogen, Lactagol, Gonosan, Mey's Poultrice, Diouviburnia, Neurosine, Ergoapiol, Bovinine (advertised on fences, billboards, lay press, etc., etc.), Sal Hepatica, Unguentine (at first glance this "ad." looks like the announcement of a fire engine manufacturer), Tongaline, Uriseptine (the Gardner-Barada Co.'s fake-formula stuff), Chiolin, Cactina, Seng and, choicest morsel of all, Bartlett's Pile Suppositories," sent to anyone anywhere for \$1.00 per box! We miss our old friends, "Fig Syrup" and "Peruna."

The peculiar but not unique case of Jane Toppan, the Boston nurse who, in 1902, was arrested for the murder of a number of patients under her charge, is carefully analyzed in a recent number of the *Boston Medical and Surgical Journal*. A very decidedly praiseworthy detail in the proceedings against this individual was the agreement of the prosecution and the defense to the appointment of a commission of three experts, who examined and passed upon the mental condition of the prisoner with reference to her responsibility. "A more practical and satisfactory method, and one more in keeping with the principles of scientific inquiry, could not have been chosen, and its adoption by the attorney-general in such an important case would seem to be a long step toward abolishing, in criminal cases at least, the opposite customary practice which has done so much to discredit expert opinion." The *JOURNAL* most emphatically endorses the words of Dr. Stedman, who prepared the report in question, and commends them to the careful consideration of all the members of our Society. Can we not use our influence to secure similar action in criminal cases, and thus remove somewhat of the reproach which now attaches to "expert testimony"?

The Lane Lectures, at Cooper College, were delivered this year by Dr. Wm. H. Welch of Johns Hopkins, on the general subject of infection. It would be quite impossible at this time or in the space at present command to attempt to review the course of lectures or in the slightest degree outline their scope and value. Unfortunately, the *JOURNAL* did not receive notice of the course until too late to publish a statement anent them in the August issue. We hope to be able to publish some of the lectures, or an abstract of the course, in subsequent issues, but at the time of writing nothing definite has been determined and we cannot promise it. Certainly the publication of these lectures would be of very great value to the medical men of California, and to the readers of the *JOURNAL* generally, and therefore we have hopes.

THE LANE LECTURES.

Dr. Welch's position in the scientific world needs no comment. He is always a pleasant and an instructive talker, and possesses to a high degree that faculty of all great men, the ability to discuss abstract scientific problems in simple, commonplace English. Among the physicians from out of town in attendance at the lectures the following were noted: Drs. W. J. G. Dawson, Napa; William T. Lucas, Santa Maria; F. C. E. Mattison, Pasadena; James G. Baird, Riverside; George F. Reinhardt, Berkeley; O. D. Hamlin, Oakland and Oscar J. Kendall, Riverside.

A full report of the examinations held in Los Angeles in July, and in San Francisco in August, will be found on page 283 of this number of the JOURNAL.

JULY-AUGUST EXAMINATIONS.

It will be seen that the general average of successful and unsuccessful candidates remains about constant. In the two recent examinations, 63.09% passed, and 36.91% failed to pass or were "conditioned"; some of the conditioned have doubtless subsequently passed. As time goes by and rejected candidates return for re-examination, there is grave danger that the board may be weakened by establishing a very bad precedent and allowing some persons who have come before it a number of times, to be "marked up," and thus "pass." If such a step is once taken, it opens a field for other steps that in the end will entirely destroy the strength of the law. We do not know that any such thing has been or will be done by the board, but the danger must be recognized and guarded against.

The JOURNAL is trying its very best to do the right thing by everyone interested and to succeed.

The policy adopted by your Publication Committee two years ago has been formally approved by the Society in convention. So long as there shall be a document known as the "Principles of Ethics," dealing with the subject of secret remedies, your Society publications will live up to it and refuse to promote nostrums by advertising them. Sometimes it takes a good deal of study to determine the right course of action, and no little strength to stick to it. The work of your Publication Committee and your editor is by no means light. Will you not help us as much as you can? Will you not help us by helping those who are helping us? The concerns which advertise with us are good and reliable; they tell the truth about their products and their preparations are to be depended upon and are reliable, to the very best of our knowledge and belief. Please patronize those who help us by advertising worthy goods in our clean pages, and thus endorse the stand which we have taken. Let them feel that you recognize a bond of friendly fellowship in this effort to do the right thing and hold to the decent course. If you have dealings

with them let them know that you are a member of the Society, receive its JOURNAL and appreciate the fact that they advertise in it. If you meet a representative of one of our advertisers tell him that you heartily support the action of your Society and approve the course of your JOURNAL and appreciate the endorsement of it which his house gives by advertising with us. You have no idea how every thing of that sort counts; it tends to establish and maintain a closer friendly feeling that counts for much in this world of business. If there is no choice between the output of two houses, one of which advertises with us, use the goods of that house and let the other house know about it. So can you help and help very greatly in carrying out the difficult task that has been set before your Council in the business administration of the Society. Please do not forget this request but act upon it. You are but working for your own Society and your own JOURNAL.

Bulletin 84 of the Bureau of Chemistry is the first document to be issued under a recent law granting authority to the Department of Agriculture to investigate food adulteration, etc.

It reports the investigations of Dr. Wiley upon the action of boric acid and borax on the human economy. The experiments carried on were exceedingly valuable, and the deductions well within the proper conservatism. The whole report is too long to reprint or to fully comment on, but the summary of the conclusions is well worth the careful consideration of every sanitarian:

While many of the individual data obtained are contradictory, the general results of the investigation secured by combining into single expressions all the data relating to each particular problem studied show in a convincing way that even in doses not exceeding half a gram (7½ grains) a day boric acid and borax equivalent thereto are prejudicial when consumed for a long time. It is undoubtedly true that no patent effects may be produced in persons of good health by the occasional use of preservatives of this kind in small quantities, but the young, the debilitated, and the sick must not be forgotten and the safe rule to follow is to exclude these preservatives from foods for general consumption.

IS THE DRUGGIST AT FAULT?

"Anent the comments of the CALIFORNIA STATE JOURNAL OF MEDICINE (May) on 'Druggist Ethics,' quoted elsewhere, we must indorse the position taken. 'Que messieurs les assassins commencent!' If our friends, the physicians, will return to the original prescription the druggist will be only too glad to second their efforts and shelve the commercialism. The druggist has no desire to be simply a middleman for the manufacturers of proprietary articles, and would be glad to employ his skill in the preparation of prescriptions p. r. n., where brains are needed and their exercise paid for."—*American Druggist*.

In Germany prayer healing has become such a fad that pharmacopelas of prayers have been published, different prayers being carefully designated for different diseases and conditions.—*Journal A. M. A.*

REPORT OF THE TUBERCULOSIS COMMITTEE OF THE MEDICAL SOCIETY OF THE STATE OF CALIFORNIA.*

Your Committee, appointed at the Santa Barbara meeting of this Society, for the purpose of investigating the question of tuberculosis as it affects the State of California, begs leave to submit the following report:

As a basis for its report, the Committee endeavored to secure statistics upon the following points:

1. The number of cases of tuberculosis in the State of California.
2. The annual number of deaths from tuberculosis in the State of California.
3. The number of cases contracted within the State and the number imported.
4. The measures that are being taken in the various localities for preventing the spread of the disease.
5. Whether or not the physicians of the State are in favor of taking measures for its prevention.

To secure this information, letters with addressed postals for reply were sent to every physician, every municipal health officer and every county recorder in the State; about 4,000 in all.

To these, 1,225 replies were received. From health officers and county recorders, as follows:

1. There were 2,308 deaths reported as occurring in the State during the preceding year.
2. One hundred and sixty-one were reported to have contracted the disease within the State; but this did not include the report from San Francisco, Los Angeles, and many other important places.
3. Thirty-eight replies told of measures being taken for the prevention of the spread of the disease, most of which were vague and indefinite. The Southern California Anti-Tuberculosis League is the only organization in the State for the purpose of preventing the spread of tuberculosis.

From physicians, replies were received as follows:

1. There are 3,183 cases of tuberculosis in the State under medical care.
2. One thousand and fifty physicians expressed themselves as being in favor of taking preventive measures. Twenty were opposed to such measures.

The answers to this last question showed a remarkable lack of unanimity of opinion upon the part of the members of the medical profession as to what steps should be taken to prevent the spread of the disease in our State. However, they may be summarized briefly as follows:

I. Measures directed toward those who are afflicted to prevent the spread of infection:

1. 70 favored disinfection of sputum.
2. 22 favored disinfection of all ejecta.
3. 20 favored health board supervision; 1 against.
4. 77 favored compulsory notification of health officer.
5. 54 favored anti-spitting ordinance.
6. 3 favored public spittoons.
7. 66 favored fumigation of the rooms of patients after death or removal.
8. 8 favored disinfection of public drinking cups, etc.
9. 18 favored disinfection of public vehicles and sleeping cars.
10. 1 favored barring them out of hotels.
11. 137 favored isolating all tuberculous individuals in separate communities, hospitals or grounds; 13 against.
12. 13 favored segregation of the poor only.
13. 4 favored the education of Eastern physicians not to send patients to our State when in the last stages of the disease; 1 against.

14. 85 favored preventing Eastern consumptives from coming here; 18 against.

15. 108 favored State sanatoria; 1 against.

16. 42 favored prevention of marriage of tuberculous patients.

II. Measures directed toward preventing the well from becoming infected:

1. 61 favored better house and personal sanitation.

2. 51 favored better municipal sanitation.

3. 143 favored a campaign of education by means of pamphlets, lectures and teaching in the public schools.

4. 71 favored physicians giving explicit instructions to the family as to the cause of the disease, and as to the necessary prophylactic measures to be taken.

Our investigations show that tuberculosis is scattered throughout the State, and that while the death rate from the disease is in the rural portions of the northern part is almost nil, that of the cities, especially San Francisco and Los Angeles, is quite high.

We wish to thank those who assisted us in this investigation, and appreciate the interest manifested by their replies, yet we are disappointed to find so many physicians in our State who have so little interest in this question, as to fail to reply when a printed return card was furnished them.

While we had no reply as to the number of deaths from tuberculosis from several health officers and county recorders, yet the number reported, 2,308, corresponds very closely with the number, 2,445, in thirteen months from January, 1903, to February, 1904, given by Dr. N. K. Foster, secretary of the State Board of Health, in a private letter to the Committee. It does not correspond, however, with the figures given in the census reports for 1900, which show that there were in California 3,480 deaths from consumption, 76 from hip-joint disease, scrofula, and unclassified tuberculous diseases; a total of 3,556 deaths assigned to tuberculosis. This illustrates the need for a better system of gathering vital statistics in this State.

One point upon which the Committee was especially desirous of obtaining information, was the relative number of cases developing within our State. Our replies to this question failed to give us the desired information; however, in thirty-six towns and cities in California, representing a population of 84,504, there were 161 deaths from indigenous tuberculosis, yielding a death-rate of 1.9 per 10,000 population. The total death-rate from tuberculosis in California is 25.6 per 10,000.

In studying the statistics of tuberculosis in the State of California, it is surprising to find that the death-rate from the disease in San Francisco is 32 per 10,000 population, while for Los Angeles it is 39. Thus the city which is the Mecca of Eastern consumptives shows a death rate only a little higher than San Francisco, which imports fewer in proportion to population.

This fact should be sufficient to show that such recommendations as:

1. Barring them out of hotels.
2. Isolating them in separate camps and communities.
3. Quarantining the State against them—

are unnecessary. Not only are they unnecessary, but they are unscientific, impossible of enforcement, and inhumane. The agitation of such measures can do nothing but harm. It frightens the people, gives them an unjustified fear, and yet does nothing to prevent the spread of the disease.

Your Committee is opposed to all such measures, and believes that it is the duty of the Medical Society of the State of California to go on record as opposing their agitation.

* Read at the Thirty-Fourth Annual Meeting, Paso Robles, April 19-21, 1901.

The question of the prevention of tuberculosis is one that admits of a scientific solution, because the nature of the disease, its cause, the contributing factors and the manner in which it is spread are well-known facts. Its solution can be approached in two ways, by education and by legislation. In all instances the former should precede the latter, because legislation cannot safely precede education.

Therefore, your Committee would recommend:

1. That physicians attempt to carry out recognized measures for the prevention of the spread of tuberculosis, such as notification and disinfection, and that they educate their patients as to the nature of the disease and the manner of its prevention.

2. That we endorse the work done by organizations (such as the Southern California Anti-Tuberculosis League) which are attempting to combat the spread of this disease, by educating the people concerning its nature, and by carrying out active measures for prevention.

3. That we favor legislation, just so far as it can be of help in combatting the disease, but oppose all unscientific, impractical and inhumane measures. We are in favor of:

(a) The rigid enforcement of anti-spitting ordinances, as applied to public places.

(b) The provision of public spittoons.

(c) Health board notification, for the purpose of instruction and disinfection.

(d) State sanatoria for the poor.

4. That we deprecate all forms of phthisiophobia, and oppose all measures which tend to foster it, especially the quarantining of the State of California against the tuberculous and the prevention of marriage of tuberculous persons.

We would recommend that the work of the Committee be continued for the following purposes:

(a) To keep in touch with similar work done in other localities.

(b) To institute educational measures.

(c) To secure the adoption of anti-expectoration laws.

(d) To devise ways and means for securing the disinfection of public vehicles used for the transportation of consumptives.

(e) To present to the Governor and State Legislature the matter of the importance and necessity of State sanatoria for the treatment of the poor.

F. M. POTTENGER, Los Angeles,

JNO. C. KING, Banning.

GEO. L. COLE, Los Angeles.

GEORGE H. EVANS, San Francisco.

EDWARD VON ADELUNG, Oakland.

Committee.

THE ROLE OF THE GENERAL PRACTITIONER IN THE PREVENTION OF CONSUMPTION.*

By F. M. POTTENGER, Ph. M., M. D., Los Angeles.

IF THE ravages of consumption are ever to be checked, it must be accomplished through the agency of the family physician. Specialists may study the disease and learn methods of prevention; they may bring forth new methods of diagnosis and cure, but without the co-operation of the general practitioner their influence can only reach a very limited circle. Nearly every family in the land is visited some time during the year by its family physician or, in case of the very poor, by the district physician, while only very few come in touch with specialists; therefore, upon the shoulders of the family physician must rest the responsibility of preventing consumption and other communicable diseases. Not only does the burden of preventing consumption

fall upon the general practitioner, but his role in the prevention is a two-fold one. He can use his knowledge and opportunities in both preventing the spread of the disease and in detecting it in its early, curable stage, thus preventing it from reaching the consumptive stage.

I need not present statistics to prove to you the importance of this problem, for the physicians of California are awakened to its enormity. I take pleasure, however, in emphasizing the fact that consumption is on the decline, and that, if the physicians would but do their duty toward their patients and the friends of their patients, and use their personal and united influence with the existing authorities, this great scourge could be conquered and its victims could be made to be as few as those of smallpox or leprosy. Such a statement is revolutionary, but it is not a utopian dream. It is a possibility, if only there can be a conscientious, intelligent co-operation on the part of all who have to face this problem.

By the aid of indirect forces, such as the establishment of better hygienic conditions, the mortality from this disease has decreased among all civilized peoples. In New York City one hundred years ago one person in every three or four died of consumption, while to-day, in spite of the density of population, only one in seven succumbs to it. In 1881 the death rate was 4.27 per 1,000 inhabitants; in 1902 it was but 2.29. The general death rate has also fallen in the same time from 31.04 per 1,000 population to 19.49. In comparing these figures we find that the general death rate has decreased in the time 37 per cent, while the rate for tuberculosis has decreased 47 per cent. This would seem to be influenced by the fact that the cause of the disease is known, and that the health authorities have taken active measures during recent years to eradicate it. What is true in New York City is also true elsewhere. In England, Germany and wherever measures have been taken, either direct or indirect, for combatting consumption, we find a marked lowering of the death rate. If this much can be accomplished without the aid of, and, I might say, in spite of, the people, what might we hope to accomplish by united effort?

The prevention of consumption depends on (1) preventing the well from becoming infected, (2) proper management of the afflicted, so that they may be cured before they reach the consumptive stage.

In order to discuss prophylaxis intelligently, we must understand etiology. There are three factors in the etiology of tuberculosis which deserve our attention: First, the soil; second, the bacillus; third, influences which lower the normal protective powers of the cell.

Soil.—In our discussion of this question, contrary to custom, I will put soil first, because I believe it is of prime importance. We have been prone to think of the tubercle bacillus as being the cause of tuberculosis, and have thus neglected to emphasize one of the most important factors in the prevention of infection, viz.: that there will be no disease, even though the bacilli be present, unless the soil is suitable, unless the body cells lose their natural resisting power. It is even questioned whether the pathogenic state is the natural state of the disease-producing germ. "The pneumococcus is often found in great numbers in the air passages of healthy persons; the diphtheria bacillus in healthy throats and the Eberth bacillus in the intestines of normal individuals. The bacillus coli lives naturally in the normal intestine, and produces no trouble; but, let an inflammation ensue and it becomes a dangerous organism." As it is with these, so is it with the tubercle bacillus. Human beings are constantly coming in contact with tubercle bacilli. They are breathing them into their air passages and swallowing them with their food. Doubtless there are very few people who live to adult life that do not have tubercular lesions somewhere within

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their bodies; yet only a small percentage of these ever develop tuberculosis to such a degree that the disease is recognizable on ordinary examination.

This means that man is naturally antagonistic to disease. His cells are possessed of defensive powers which, under ordinary circumstances are capable of protecting him from invasion. Neither pneumococci, diphtheria bacilli, typhoid germs, colon bacilli nor tubercle bacilli are harmful under natural conditions. Nature's defenses are sufficient, unless weakened. Hence the condition of the individual cells of the organism, the soil, is of paramount importance.

Bacilli.—While we recognize the tubercle bacillus as the specific cause of tuberculosis, yet it is very questionable whether it is capable of producing infection in a healthy individual, unless it be from a very virulent culture or the inoculation be one of great numbers. Nevertheless the fact that it is the specific cause of the disease makes its destruction an important factor in prevention.

Influences Which Lower the Normal Protective Power of the Cells.—If germs are not naturally pathogenic, or, if they are naturally so but are unable to exercise their power as long as the body cells possess their natural resistance, then those things which depress cell activity or injure the cells of the organism must be taken into account. Whether or not either of these conditions is true, there can be no doubt but that measures which lower vitality count immeasurably in aiding infection.

Bearing in mind these three etiological factors in the production of tuberculosis, we can formulate plans for its prevention. That portion of the population which is not suffering from consumption tries to throw all the burden of prevention upon the afflicted. This is wrong. It is unscientific. It is shifting a responsibility upon the sick which, to a great extent, rightly belongs to the well. If the spread of consumption is to be prevented, it is as much the duty of the well man to preserve the natural resisting power of his body cells (keep the soil unsuitable for infection) as it is for the afflicted to avoid scattering infectious material.

This can be done by living a natural hygienic life. Sunshine, fresh air, good food, cleanliness, proper regard for the functions of the various bodily organs and good habits will do much toward preserving the natural defensive powers of the body cells. This is an individual matter, and should not be shifted. The common fear of the consumptive entertained by those who are not afflicted is analogous to the apprehension of a farmer who has no fences around his grain fields, and spends his time worrying lest his neighbor's cows destroy his crops. Common sense would say, "Build fences." And I would say to those who are suffering from phthisiophobia: "Build fences. Protect yourselves against infection by keeping your body cells in a state of high resistance; then, if some unfortunate victim of consumption chances to bring infectious material in contact with you, you will be secure." It is better for each one to do what he can to protect himself rather than to throw the entire burden of prevention upon those who are afflicted. I would not counsel any carelessness upon the part of those who are ill, but I would make health doubly sure by having the soil unsuitable and the seed destroyed.

Since all do not live hygienic lives, it is well to teach the people those things which lower vitality, that they may avoid them. A careful inquiry into the history of tuberculous patients reveals a condition of mental or physical depression preceding or coincident with infection in a surprisingly large number of instances. These conditions lower the normal resistance of the cells and allow the bacilli to overcome the host. Such conditions are:

1. Physical. (a) Overwork, especially under bad hygienic conditions. (b) Overcrowding in rooms badly

ventilated and poorly lighted. (c) Underfeeding. (d) Excesses, especially alcoholic and venereal. (e) Disease.

2. Mental. (a) Worry over real or imaginary troubles. (b) Depression from other causes.

Some of these conditions involve questions of an economic, some of a social and some of a moral nature, while others are matters of individual peculiarity. Much could be accomplished in overcoming some of these by the enactment of wholesome laws. A maximum number of hours should be designated as a day's work, varying according to the ages of the workers and the character of work done. Workshops, offices and dwellings should have certain requirements as to floor space per occupant; a certain standard of ventilation, and they should be so constructed that a maximum of sunshine would enter the buildings. The poor should be discouraged from crowding together in the tenements of cities, and encouraged by low rents and cheap and rapid transportation to make their homes in the suburbs, where cottages can be constructed on lots sufficiently large to allow sunshine and fresh air to keep them pure and wholesome.

Education will do much to overcome some of these depressing elements, while others are purely within the jurisdiction of the physician as such. Those diseases which are known often to be followed by tuberculosis, such as pneumonia, la grippe, typhoid fever and measles, should be treated more carefully than they frequently are. A delayed recovery should be carefully inquired into, and should put both physician and patient on his guard.

The next problem in the prevention of the spread of tuberculosis is the one which is usually considered, viz.: the destruction of the bacilli. This is largely a matter of education and honor. Whether or not this shall be accomplished depends almost entirely upon the medical profession. They must educate the people to an understanding of the necessity of such a measure, and must also see that it is carried out. This requires upon the part of the members of the profession:

1. Accurate knowledge of the method of scattering infection.

2. Ability and a patient determination to detect the disease when suspected.

3. Frankness in dealing with tuberculous patients, so that they may be apprised of the nature of the disease, and not soothed by such deceptive terms as "throat trouble," "bronchial trouble," "malaria," etc.

4. Consciousness of the enormity of the tuberculosis problem, and a determination to use their influence, not only with the patients, to see that they are careful, but with the administrative authorities, to see that proper assistance is provided for those who will not be careful of their own accord. In order to prevent the bacilli which are cast off by a tuberculous patient from becoming dangerous to others, rules for careful disinfection of the sputum or other bacillus-bearing discharges must be observed. For this to be done the patient must be told of the nature of his disease, and there must be someone to instruct him.

For the well-to-do this can and should be done by the family physician; but for the poor (and the great majority of tuberculous patients are poor) some other provision must be made. This naturally and rightly falls to the health officer. But how is he to do it unless he knows where these patients are? So the next important step is notification. I believe that notification should at first be voluntary, and that the physicians should be educated and interested by occasional circulars from the health department. *Notification should not be for quarantine, but for instruction.* The patient should understand that the health authorities are his friends, and that they wish to instruct him how to care for his sputum, that he may not reinfect himself or those about him. Health

boards should provide physicians with blanks for reporting cases, upon which they should signify whether the health authorities are to visit the patient and instruct him or whether they would attend to it themselves. In this way there would not be anything of a meddlesome nature in notification.

To carry out this work as it should be several assistants would be required, whose duty it would be to visit the tuberculous and give them instructions in hygiene, disinfection and general measures of prevention. In no way could this be accomplished better than by a municipal tuberculosis dispensary. The number of tuberculous patients who report to the physicians is a very small proportion of the number ill; but if the municipality would establish a free dispensary, where the poor could report for instruction and help, and have connected with it a corps of trained nurses who would instruct the afflicted and visit their homes and help to make them hygienic, it would rid the tenements of many sources of infection. Such a dispensary should also provide spitcups and disinfectants; and it would be an act of mercy if such foods as milk and eggs could be given to those who were in need of them.

Such a dispensary would be visited by many who could be restored to a degree of health, where they would be capable of self-support for years, and many who would fully regain health if they could but have an opportunity, and by many whose chances of life are few, but who would scatter infection if allowed to remain in their miserable quarters. For the former there should be sanatoria, where skilled treatment would restore them to their wage-earning power; for the latter, hospitals where they could spend their last days under hygienic surroundings. The expense thrown upon the municipality and state for the care of those who become their wards through the effects of this disease would doubtless go far toward maintaining such institutions.

Another manner in which the general medical man may render efficient service in the prevention of the spread of consumption is by acquainting himself with the early signs of tuberculosis, and learning to make an early diagnosis. It is conservative to say that if the disease were diagnosed as it can be in its very incipency, at least 75 per cent could be restored to health by intelligent treatment. Think of what this means from the standpoint of prevention! Seventy-five per cent of the sources of infection could be eliminated by early diagnosis and treatment!

It is a sad fact that patients do not present themselves for examination at this favorable time as often as they should; but let us be sure that we recognize the disease when they do come. Family physicians should always bear this disease in mind, and then if any member of the families in which they are called shows suspicious symptoms, it would be a kindness to carefully examine them.

In this short discussion of one of the most serious problems before the medical world I have endeavored to point out the part to be played by the general practitioner. From our discussion it can readily be seen that if the disease is to be checked, it must be done largely through his efforts. From his superior knowledge of matters sanitary, and from his superior opportunity, owing to his close relationship with the family, he should, and he must, take the lead in this great work. He must be a strong educational force. It is his opportunity to inculcate into the minds of his friends and families the correct ideas of the disease and its prevention. It is his to insist upon the well remaining so, and upon those ill of the disease taking precautions to prevent infecting others. It is his to teach the people the necessity of an early diagnosis, and it is his to be able to make it. It is his to form public opinion upon this great question, and urge upon the administrative authorities those

measures which are necessary to check the spread of the disease.

In the name of humanity, for which our noble profession was called into existence, let medical men take up this neglected cause. I am not an alarmist. I do not believe that this great state is in danger of becoming overrun with consumptives. I have too much faith in the common sense of the medical profession and the people as a whole to entertain such an opinion. The cause of tuberculosis is known. The methods of prevention are understood, and wherever put into operation have proved effective. The death rate from the disease is on the decline, and if we will but act as well as we know, many of us may live to see the "great white plague" shorn of its power.

OBSERVATIONS UPON SANATORIA FOR PULMONARY TUBERCULOSIS.*

By JOHN C. KING, M. D., Banning.

I HAVE no intent to decry the institutions referred to in my title. Properly located, equipped, conducted and restricted they merit professional support. It is well, however, to emphasize the fact that the evolution of the sanatorium, from the merely experimental to the ideal, is not yet complete. Future experience, even more than past achievement, must determine the relative value of sanatorium methods and the class of patients best adapted to them, together with many other important problems.

Like other useful innovations, sanatoria have become a "fad." Indiscriminate praise has generated an enthusiasm that reminds one of the optimistic reception accorded by our profession to former new procedures and remedies. Numerous medical men, unhampered by special training, are establishing institutions everywhere, and are appealing to their brethren for patients to fill them. The apotheosis of the sanatorium has also been taken advantage of by gentlemen whose commercial instincts are keen but who are deficient in ethical culture. One has a health camp on the desert, another an elegantly equipped building in the city. These appeal to the laity direct, through all the well-known advertising channels. More than twenty years ago I was obliged to relinquish my practice in the East on account of tuberculosis of both lungs. Ever since then I have especially studied medical tuberculosis. Twenty years ago the accommodations for tubercular invalids were almost *nil* in Southern California. For instance, at that time no room with fire or in any way heated was provided by any Los Angeles hotel. I am confident that a larger percentage of tuberculosis was cured then than now. It is, of course, impossible to prove such an assertion; nevertheless, I am sure results were better under primitive conditions. As the open air or tent was superseded by the cloth-lined "shack"; it, in turn, by the comfortable, plastered house, and it, finally, by the luxurious building with uniform heat and indoor toilet; as these changes took place the net results became poorer. I find myself in practice reverting more and more to the primitive tent life—becoming more and more afraid of the new building advertised as possessing "all modern improvements."

Our southern country is large and many-featured. Much acrimonious debate has arisen between localities as to which of them is best adapted to the needs of invalids. I am frequently asked, "Where is the best climate for consumptives?" I always reply, "There isn't any." There is always a best place for each individual, but never a "best place" for all. Of patients sent to me, I am obliged to send at least twenty-five per cent to some other resort. The great art is to select a location adapted to each particular

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patient. It is more of an art than a science. Long experience enables one to form a fairly accurate judgment as to whether a given patient will do better at a mountain altitude or below sea level on the desert; at the humid sea coast or in the arid interior. The different effects of the same climatic conditions upon two patients having the same disease, so far as the microscope can determine, is a fact. One may be favorably influenced thereby, the other made worse. A study of the physiological effects upon the healthy human being of varied temperature, humidity, altitude, etc., convinces one that each of these climatic elements has a therapeutic range of its own. No matter where a sanatorium for consumptives is located—in Northern New York or in Southern California—the climate will suit a certain number. The point is to select for each patient, not a given sanatorium, but the climate best suited to him in particular.

In this discussion the doctor becomes the all-important problem. Once in a society meeting I referred to the office of a prominent oculist. I spoke of its elaborate equipment with scientific apparatus, of its perfect adaptation to its purpose. I suggested that if its owner would transfer to me his office and his practice for three months I could make some money, and, incidentally, I could ruin more eyes than he could repair in a lifetime. The illustration is pertinent. A sanatorium is merely an instrument. Its value depends upon the doctor back of it. It is not a fetch to conjure with. No matter how elegantly furnished, how elaborately provided with sun baths and X-ray plants, with good climate and pneumatic cabinets, the cures depend upon the intelligence that utilizes these things. No matter how valuable they may be, they are merely accessories. Detweiler in the Black Forest, Trudeau at Saranac Lake, Von Ruck in Asheville—can one imagine surroundings more different! Yet each has succeeded. It is the man that counts, not the building, nor yet the climate. Let us send our patients to a man, not necessarily to a sanatorium.

So-called sanatorium treatment can be conducted outside as well as inside a sanatorium. In both cases the same drugs may be administered in the same manner. When necessary nurses of equal intelligence and training may guide, control or minister to the patient. The same daily supervision may be exercised by the attending physician. The same hygienic and dietetic regulations may be enforced. While it is true that certain patients enter into the spirit of sanatorium government, and are benefited thereby, it is also true that others are depressed by it, and react badly toward it. Some persons enjoy institutional methods, and are pleased to associate with other invalids. Others again do better segregated from sufferers like themselves, object to community rules and require regulations made personal to themselves. We ought not to assume that all should be sent to a sanatorium, or that none should be sent there. I plead for individualism. Send each where he will probably do best. Here, again, the art of medicine must be practiced rather than its science. It is impossible for the average pulmonary patient to remain many months in an expensive sanatorium; aside from financial considerations, patients chafe against inactivity. No matter what varied entertainment is provided, the ennui finally becomes intolerable. The hope is often proffered that a few months of sanatorium treatment will effect a cure. That hope is usually a cruel delusion.

There are two classes of patients. First, those in the so-called pretubercular stage. Their general health has become so undermined that they are in what may be termed a superlatively receptive condition, but no tubercle bacilli are present, nor have any classical symptoms of pulmonary tuberculosis developed. A few months' residence in a sanatorium,

or, and equally, a few months spent in quiet country retirement, under skilled medical direction, will restore them to health. These, however, are but a small proportion of those who come to our Southern California resorts. We meet only too few of them. The second class includes all who suffer from actually developed tuberculosis. With them the fight is not a question of months, but of years. The three-year relapse limit ordinarily applied to cancer is none too short for application to these patients. I have repeatedly seen the bacilli disappear from the sputum, temperature fall to normal, normal weight and strength return, and yet, after many months or a few years of excellent health, I have seen these patients succumb to the disease. Annually for some years I have had my share of advanced cases formerly pronounced cured at some sanatorium. Indeed, I am disposed to consider the twelve to twenty months following apparent cure as a very critical period in the history of the disease. A period during which the patient should remain under skilled medical supervision, and, if possible, in the climate and amid the surroundings in which improvement took place. I have frequently urged patients who were doing well to purchase a plot of ground and erect upon it a small cottage suited to their requirements. I have bestowed daily attention upon the minutest details of their lives for months after mere symptomatic recovery. As they became better I have induced them to cultivate their gardens, to become interested in live stock, in flowers, in chickens, in anything to prevent ennui and make life worth the living. After an additional year or two most of them were permanently cured. In fact, applying the three-year limit, these people show vastly better results than those pronounced cured and dismissed from professional care as soon as bacilli have disappeared and temperature has become normal. Many of these patients have returned to business in Eastern States, and have remained well for periods varying from three to fifteen years. Others can never leave the climate and surroundings in which they have recovered. For instance, the wife of a prominent official of the Pullman Company has been under my care about fifteen years. Bacilli disappeared from her sputum, she became the picture of health, absolutely no symptoms remained. And yet every time she has ventured to visit Chicago she has, within four weeks, developed fever, cough and hemorrhage. The point of this argument is the limitation of the sanatorium—in that it must, of necessity, lose the patient at a most critical time, that is, the time of apparent recovery.

There is one class of people—the poor—to whom the sanatorium is absolutely essential. Every practical medical man is familiar with the truth of this statement. Its truth does not depend upon the supposed fact that the sanatorium life is the best for those who have pulmonary tuberculosis, but upon the real fact that no other hygienic life is possible for the poor. From every standpoint, philanthropic, moral, financial, adequate provision should be made for them by the municipality or the state. "Adequate provision" implies sufficient accommodation to prevent those in process of cure from being forced out by new arrivals. Such institutions can only result from an aggressive campaign of education among the people. Meanwhile we cannot accord too much encouragement and praise to such efforts as the Barlow Sanatorium of Los Angeles and the health camp under the care of the Redlands physicians.

TUBERCULOUS PERICARDITIS.

Dr. George William Norris, in the *University of Pennsylvania Medical Bulletin*, gives the result of his studies on this subject, and reports its occurrence in 82 cadavers, out of 7,219 which have been autopsied in the Philadelphia hospitals.

HEALED AND QUIESCENT PULMONARY TUBERCULOSIS; AN ANALYSIS OF FIVE HUNDRED CASES, WITH REMARKS ON PLEURAL TUBERCLES*

By GEORGE BLUMER, M. D., San Francisco, and AUGUST JEROME LARTIGAU, M. D., San Francisco.

IN THE literature on pulmonary tuberculosis numerous contributions are to be found dealing with the spontaneous healing or retrogression of the disease. Some writers definitely speak of the process as "healing," while others speak of "retrogression" or "latency." It is apparent from this looseness of terms that it is necessary, in an article of this nature, to define what is meant by "healing" and what by "latency," or, as we have termed it, "quiescence."

We have considered four classes of lesions, as indicative of healed or quiescent tuberculous processes in the lungs: 1. Sharply localized, usually depressed cicatrices, found, as a rule, at or near the apices of the lungs. 2. Encapsulated calcareous nodules. 3. Encapsulated caseo-calcareous foci. 4. Encapsulated caseous masses in which the surrounding lung showed no evidence of recent tuberculous changes.

As regards the tuberculous character of the two last named classes of lesions there can be no question. Both histologically and by animal experiment they have been proven to contain tubercle bacilli. Kurlow, by inoculating large numbers of guinea pigs, showed conclusively that all caseous and caseo-calcareous nodules are infective. Loomis and Dejerine have also found tubercle bacilli in a large percentage of caseous and caseo-calcareous foci. It is evident, then, that these foci, even when encapsulated, must be considered merely quiescent and not healed, and, in fact, it has been demonstrated postmortem that such foci may take on renewed activity and lead to rapidly fatal tuberculosis.

As regards the second class of lesions, also, the encapsulated calcareous areas, while absolute proof of their tuberculous nature is lacking, there is practically no doubt of it. Inoculation experiments with material from such areas have been uniformly unsuccessful, but it is quite easy to trace all the intermediate stages between a pure caseous and a pure calcareous area, and furthermore we know of no disease other than tuberculosis which is apt to produce calcareous areas in the lungs with the same frequency. Few other known processes result in such calcareous lesions.

As regards the tuberculous nature of the puckered cicatrices so frequently found at the apices there is some difference of opinion. Most of the modern writers, however, regard them as tuberculous residua. We have classed them as such, for the following reasons:

They are situated in almost all cases at the points near the apices of the lungs, which are the common sites of active tuberculosis. They are often associated with evident tuberculous lesions elsewhere in the lungs or in the bronchial glands. Histological examination shows in the immediate neighborhood of a certain percentage of them healing tubercle nodules. They have been found as the only lung lesion in cases which at one time showed clinical signs of active tuberculosis, but which healed before death (Laennec, Bennett, Jaccoud). Taking all this evidence into account, there seems to us no reasonable doubt that these scars represent healed tuberculous foci.

We have not included as evidences of healed tuberculosis old pleural adhesions or healed cavities. As far as pleural adhesions are concerned, we do not doubt that some of them represent healed tuberculous processes, as the work of Schlenker and others would indicate, but we know of no sure method of differen-

tiating those due to tuberculosis from those due to other causes. While we recognize the existence of healed tuberculous cavities, we have not considered them specially, as our series of cases contained none of this character.

Inasmuch as the great majority of writers consider the healed and latent cases together, we have thought it better, for purposes of comparison, to do the same. The following list shows the percentage of autopsies in which healed pulmonary tuberculosis is found according to different authors: Heitler, 4 per cent; Boudet, 5; Loomis, 6.1; Fowler, 9; Martin, 9.4; Coats, 15.2; Bollinger, 17.2; Vibert, 19; Staudacher, 22; Goldschmidt and Luxenberger, 24; Blumer and Lartigau, 28.8; Harris, 38.8; Massini, 39; Rogee, 51; Dejerine, 51; Boyer, 98.1; Aupinel, 100.

Perhaps the most striking point about these figures is the very marked discrepancies between the findings of different authors. It is evident that there must be some cause, or, more probably, a multiplicity of causes, to explain this. A reference to the method of compilation of the statistics, and the class and number of cases observed, explains much. In statistics like Heitler's, whose observations cover over 16,000 autopsies, routine autopsy records were used. The autopsies were made by many different individuals, some, if not most, of whom were doubtless not particularly interested in the subject under discussion, and healed tuberculous lesions were probably not especially looked for. Our own experience, and that of others, has shown that it is very easy to overlook many of these lesions unless special attention is paid to them. Then again there is a difference in the method of compilation of the statistics which we have endeavored to rectify as far as possible in the foregoing list. Some authors in calculating percentages exclude all cases of active pulmonary tuberculosis, while others include all cases autopsied. The above list, as far as we are able to verify it, refers to the percentage of healed tuberculosis in all cases. In Boyer's statistics, however, cases with active tuberculosis were not included. Another source of difference is that some statistics cover cases from hospitals with acute services; others, cases from hospitals which admit chronic cases, and still others, cases dead of accident or suicide. The most important factor, however, and one which is not particularly referred to in many reports, is the age of the subjects. The question of the relation of age to active and quiescent or healed tuberculosis will be considered later; in a general way it may be stated that the tendency toward healing in tuberculous affections increases in direct ratio to the increase in age. This fact serves to explain the high percentages of healing of some writers. Thus Aupinel's sixty autopsies, with 100 per cent of healed tuberculosis, were all performed on old men. Rogee's cases, with 51 per cent of recoveries, were all old women. The source of Dejerine's material we have been unable to learn. Most of the material showing a moderately high percentage of recoveries was like our own cases, from varied sources or from a general hospital, and covering all ages. The factors above mentioned explain most of the discrepancies observed in the table.

The 500 cases analyzed by us were consecutive cases, and were all studied with especial reference to healed or quiescent tuberculosis. An analysis of our 500 cases from the standpoint of the character and the localization of the lesions gives the following results: Of 330 males, 94, or 28.4 per cent, showed evidences of healed or quiescent tuberculosis of the lungs; of 170 females, 50, or 29.4 per cent, showed evidences of healed or quiescent tuberculosis of the lungs.

The incidence of single and multiple lesions was as follows:

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Sex—		Single.	Per Ct.	Multiple.	Per Ct.
Male	94	56	59.6	38	40.4
Female	50	30	60.0	20	40.0

The character and localization were as follows:

*Scars, 111.

		Male.	Female.
At or near apex.....	106	78	28
Right lung	22	16	6
Left lung	40	26	14
Both lungs	44	36	8
At or near base.....	5	3	2
Right lung	4	3	1
Left lung	1	0	1
Right middle lobe	0	0	0
Calcareous nodules, 40.			
At or near apex.....	27	12	15
Right lung	9	4	5
Left lung	17	7	10
Both lungs	1	1	0
At or near base.....	11	8	3
Right lung	5	4	1
Left lung	6	4	2
Right middle lobe.....	2	1	1
Encapsulated caseous areas, 15.			
At or near apex.....	12	8	4
Right lung	8	6	2
Left lung	4	2	2
At or near base.....	3	2	1
Right lung	2	1	1
Left lung	1	1	0
Right middle lobe.....	0	0	0

It will be seen from the above tables that the situation of the healed or quiescent lesions corresponds, as would be expected, to the ordinary seats of active pulmonary tuberculosis.

An inquiry into the relation between the age and sex on the one hand, and the incidence of active and healed or quiescent tuberculosis on the other, gives the following results. This table covers 404 cases, in which the age and sex were determined. Of these, 266 were males and 138 females. Both sexes are considered together in the first table, and then each sex is taken up separately:

BIRTH	CASES	ACTIVE TUBERCULOSIS	HEALED TUBERCULOSIS
To 10 years	51	10 = 19.6%	1 = 1.9%
10-20 "	27	9 = 33.3%	4 = 14.8%
20-30 "	47	13 = 27.6%	6 = 12.7%
30-40 "	77	6 = 7.7%	14 = 18.1%
40-50 "	84	2 = 2.3%	33 = 39.2%
50-60 "	60	5 = 8.3%	32 = 53.3%
60-70 "	39	1 = 2.5%	27 = 69.2%
70-80 "	15	2 = 13.3%	7 = 46.6%
80-90 "	3	1 = 33.3%	2 = 66.6%
90-100 "	1	0 = 0%	1 = 100%

MALES, 266.

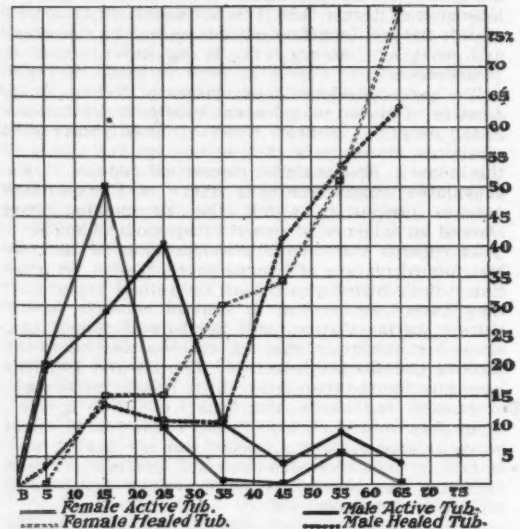
To 10 years	31	6 = 19.3%	1 = 3.2%
10-20 "	21	6 = 28.5%	3 = 14.2%
20-30 "	27	11 = 40.7%	3 = 11.1%
30-40 "	47	5 = 10.6%	5 = 10.6%
40-50 "	58	2 = 3.4%	24 = 41.3%
50-60 "	41	4 = 9.7%	22 = 53.6%
60-70 "	27	1 = 3.7%	17 = 63.3%
70-80 "	11	1 = 9%	6 = 54.5%
80-90 "	2	1 = 50%	1 = 50%
90-100 "	1	0 = 0%	1 = 100%

FEMALES, 138.

To 10 years	20	4 = 20%	0 = 0%
10-20 "	6	3 = 50%	1 = 16.6%
20-30 "	20	2 = 10%	3 = 15%
30-40 "	30	1 = 3.3%	9 = 30%
40-50 "	26	0 = 0%	9 = 34.6%
50-60 "	19	1 = 5.2%	10 = 52.6%
60-70 "	12	0 = 0%	10 = 83.3%
70-80 "	4	1 = 25%	1 = 25%
80-90 "	1	0 = 0%	1 = 100%

*These figures refer to the number of lesions, not the number of cases.

It will be seen from the above tables that pulmonary tuberculosis shows very little tendency to heal during the first twenty years of life; after that, however, the active cases decrease with almost uniform certainty, while the healed or quiescent cases increase in approximately the same ratio; this and the relation to sex are well shown in the accompanying chart. There is apparently a slight tendency, judging from our figures, for the active form to increase and the healed to decrease after the age of 65, but the number of cases in our series over 70 is so small that we feel hardly justified in concluding that this is the case.



A comparison of the tables for the two sexes shows that in the female the tendency toward healing occurs much earlier than in the male, as does the maximum incidence of active cases. This, perhaps, might be expected from the earlier development of the female.

We have been unable to find any observations bearing on the question of the relation of sex to the incidence of active and healed or quiescent pulmonary tuberculosis, but the publications of certain writers as regards the effect of age are of interest in connection with our results. Goldschmidt and Luxenberger give figures covering three years' work in the Munich Poliklinik with regard to the average age of men and women dying from pulmonary tuberculosis. The average age of the men was just 39 years; that of the women, 32.7 years. Heitler states that, judging from his statistics, the tendency to healing shows a gradual increase up to the age of 60 years. After this age the number of cases observed was too small to warrant the formulation of accurate data. Harris' statistics from 20 to 70 years of age, with regard to percentage of healing, are as follows: 20 to 29, 26.9 per cent; 30 to 39, 31.4; 40 to 49, 47.2; 50 to 59, 42.3; 60 to 69, 50.

The statistics of Coats, and the more recent ones of Naegli, both of which series are not confined to pulmonary tuberculosis, but cover all forms, are also interesting from this point of view.

Coats summarizes his figures on this phase as follows:

Under 40—Active tuberculosis, 64.5 per cent; healed tuberculosis, 29.25 per cent. Over 40—Active tuberculosis, 35.5 per cent; healed tuberculosis, 70.75 per cent.

Naegli's figures are based on very careful examinations, covering 500 autopsies. His figures show:

Under 18—Active tuberculosis, 12.5 per cent; healed tuberculosis, 4.5 per cent. Over 18—Active tuberculosis, 26.1 per cent; healed tuberculosis, 69.7 per cent.

Most of Naegli's cases were in adults, and those in children were such cases as would enter a general hospital, so that the actual percentage of children reported as tuberculous is probably too low. Nevertheless the figures serve to show the ratio between active and healed or quiescent tuberculosis in children.

The recent work of Hodenpyl has called attention to miliary tuberculosis of the pleura, and as this is almost exclusively confined to the visceral pleura, and shows marked tendencies toward healing, we have investigated 108 cases with regard to its occurrence. Hodenpyl's work showed that in nearly 50 per cent of adult lungs there were present, usually just under the visceral pleura, miliary tubercles in greater or less number. Some cases showed only one or two nodules; others showed hundreds of them. In some instances these nodules seemed to bear a causative relation to tuberculous pleurisy, but in the great majority of cases they tended to become fibrous, and this is so frequently the case that they have been described as miliary fibromata of the pleura by some authors. Hodenpyl demonstrated that they had the microscopic structure of tubercles, and that they contained in some instances tubercle bacilli. According to Hodenpyl, Weigert is the only other writer who has touched upon this subject, and he barely mentions it. He notes, however, the difficulty of distinguishing such tubercles in their later stages from fibromata.

The 108 cases investigated by us were adults between 19 and 72 years of age. None of them were the subjects of active pulmonary tuberculosis. From previous and our own investigations we have taken for granted that the majority of these nodules are of a tuberculous nature, though this was not absolutely proven in all instances. Of the 108 cases, pleural tubercles were found in 61, or 56.4 per cent. In 56 cases the tubercles were on the visceral, and in five on the parietal pleura. They occurred on the right side in 27 cases, on the left side in 19, and on both sides in 15. Tubercles from 38 of the 61 cases were subjected to histological examination, and were shown to present the usual histology of tubercle. Seven of the nodules were inoculated into animals, all of which subsequently developed tuberculosis. In only one of this group of seven could tubercle bacilli be detected microscopically, and then in but small numbers. These findings corroborate Hodenpyl's, and indicate that by animal inoculation probably the greater number of these pleural tubercles can be shown to contain tubercle bacilli.

As a result of these observations on pulmonary and pleural tuberculosis we conclude:

1. Healing and quiescence of the tuberculous process are very frequently observed in the lungs of individuals coming to autopsy.
2. Up to the age of 18 or 20 years there is very little tendency to quiescence, and still less to healing.
3. From the age of 20 on, the tendency to healing becomes greater and greater, so that in old individuals a very large percentage of autopsies may show evidences of it.
4. The tendency toward healing or quiescence begins earlier in women than in men, while the point of maximum incidence of active pulmonary tuberculosis is also reached earlier.
5. Miliary tubercles of the pleura are of frequent occurrence.
6. They usually undergo fibrous transformation, but it is probable that many of them still contain active tubercle bacilli.

DISCUSSION.

THE REPORT OF THE COMMITTEE ON TUBERCULOSIS AND THE FOREGOING PAPERS BY DRS. POTTINGER, KING AND BLUMER AND LARTIGAU WERE DISCUSSED TOGETHER, AS FOLLOWS:

Dr. George L. Cole, Los Angeles.—It is a very pleasing thing to me to see the prominence given to this question of tuberculosis. It is only a few years ago that any paper read upon tuberculosis simply meant a vacant room. Now the room is well filled. It seems to me that it is along the line of preventive medicine, as medicine is about to resurrect itself from a sleep of years. We have made a good beginning. We are talking about the prevention of tuberculosis now; yet 125 years ago in Italy and southern Europe, where the patients went down from northern Europe, they were talking of just these same questions. They even then had laws requiring the reporting of cases, and fines were imposed for the non-reporting of tuberculosis. But for years after, the profession went to sleep again, and has just awakened. Now, because of the advance of bacteriological work, we are on firmer ground. With regard to these papers which have just been read, they have covered the ground very thoroughly. Dr. King spoke of sanatoria as a fad. It is, I think, one of the good fads. My regret is that it is not more of a fad. It is not as popular as it might be. Sanatoria have been advocated for over fifty years. What Dr. King said about their being installed in the city by one man and in the desert by another is a fact that works itself out pretty well. Sanatoria for tuberculous people are not popular in cities. They must be out in the mountains or somewhere away from the city. What he has said about sanitation in this country, would be hard to prove. Still the death rate is not lessened by sanitation. I can hardly see how properly heated rooms could increase the death rate. It is true that a certain way of heating rooms is objectionable. This is a warm climate, and the ordinary way is the little oil stove, which ought to be kicked out. But how proper sanitation and heating with warm air can be otherwise than beneficial I do not see. What he said about the doctor in the sanatorium is very true. I have in mind especially Dr. Trudeau of Saranac. Had he been placed in a different climate in starting that sanatorium how much more good he could have done. He has been a strong man in tuberculosis. With regard to the paper read by Dr. Blumer, in which I was very much interested, what he said about age in relation to tuberculosis bears out the fact which I have always observed, that older people tolerate tuberculosis better than young. His mention of tuberculous pleura seems to carry out a general impression that tuberculous pleurisy is rather of the benign form of the disease. We see patients with a little pain in the side; we diagnose it as pleurisy; they get pale and anemic; they go on for a year or two under our care without any symptoms, then they have another attack; yet they go on and on to old age, and die of something else. Statistics on tuberculosis, as a rule, do not count for much. The committee on tuberculosis has tried to be very fair in getting at our statistics with regard to the disease in California. Dr. Pottenger has said many wise and true things. There is one thing that we hardly take into consideration, that is, the natural susceptibility or practical immunity of some people toward tuberculosis and the bacilli of tuberculosis upon certain soil. You cannot make it grow any more than you can make wheat grow in certain soil. It simply will not grow. You may implant it in the system of another person and you cannot prevent its growth. We can have five children in the same family exposed to measles or scarlet fever. One does not contract it, but the other four will take it. We must try to elevate the

standard, but we must not forget that some people are more susceptible than others. With regard to this report on tuberculosis, it is interesting to see that the largest number of physicians seem to agree upon one topic, and that is that we should have a campaign of educating the public. One hundred and fifty-three agreed to that. Let education precede legislation. I think that it is quite time that this society should be put upon record as being opposed to quarantining the state of California against tuberculosis. There is no reason for barring the people from coming here. Let us go on with the education and there need be no question of quarantining the state.

Dr. J. H. Parkinson, Sacramento.—In Dr. Pottenger's paper there was one point which is excellent: the patient must understand and the friends be made to understand the true nature of the disease. We should always insist upon it, by bacteriological examination. The education of the public is, of course, the whole point in this matter, and in connection with that point is this: that the public does believe in heredity and in the infection of this disease. These two points—heredity and infectiousness of the disease—should be brought up and an understanding insisted upon. To instruct the public is the great point. Through the Board of Health it can be done. Compulsory notification should be also taken up. Tubercular patients should be located and instruction given to them. Another point is to prove to the public that there are a great many forms of tuberculosis which are pathologically identical. Tuberculosis of the knee or spine and of the brain, and pulmonary tuberculosis, are identical; and you can have infection from the spine to the lung, or lung to knee, etc., as the case may be. I have a case where pulmonary tuberculosis has resulted in an infection of the spine in a child. I did what I could to prevent it. The child of the sister of this one is now dying from spinal tuberculosis. Education is the main thing; notification should be carried out by the profession.

Dr. Edward von Adelung, Oakland.—I was interested in the point brought out in Dr. Cole's discussion in regard to statistics. Of course the committee on the tuberculosis subject had to deal with some statistics, and we did the best we could. But it reminds me of a little piece of poetry which runs:

"There was a young lady from Sky,
Who had a figure like the letter I.
She said, 'It is too bad, but then I can pad,
And show that figures lie.'"

I was interested in the presentation of the paper which involved this chert. We will find that the post-mortems always give us the facts. There was a question in Dr. Pottenger's paper relating to physicians and their assistants in health office work in controlling tuberculosis. Physicians neglect to report these cases because of the relation between the patients and the doctors. It ought to be generally known that the reports of these cases are private, and are kept so; and if this is impressed upon the physicians and the patients, I think that after a while physicians will report them as they get them. Another point that is given slight attention is the resistance to the disease in question. More attention should be given to the diseases that prepare the system for invasion of tuberculosis. Measles is one of the diseases, and it is regarded as an insignificant disease, not only by the laity, but also by the profession. That point should be impressed upon everybody, because measles is a most serious disease. You will find that measles is a dangerous disease; dangerous because it has certain sequelæ. The ignorance that is prevalent fails to connect a disease that follows months or years after. A child has the measles, and gets well. It has an otorrhea that dries up, and later

we have a chronic otorrhea, which is probably due to the measles, and is tubercular, leading to tubercular brain lesion and death. It is our duty not only to encourage fresh air, exercise and sunshine, but also to take due notice of diseases which prepare the system for the invasion of other diseases. We need jarring on the subject. Some parents desire that their children shall have measles and other childhood diseases and get over them, and at the same time, unfortunately, the family physician too often advises that very thing.

Dr. Elizabeth Follensbee, Los Angeles.—I am a teacher, and I do not think that I have allowed a class to go out from under my instruction without telling them to never say that it is "only measles," or "only whooping cough." Dr. von Adelung has covered his subject very thoroughly. I wish that every physician would realize the fact of the seriousness of this trouble. Measles should not be looked upon as an unimportant disease.

Dr. A. Barkan, San Francisco.—I was interested to hear the point made about the system of dispensaries for tuberculosis. I am sure that the reader of that paper has noticed that in France and Belgium the authorities have had the system of dispensaries carried on for seven years past. The point is well worth considering. Another point with regard to tuberculosis of the ear. The temporal bone is just as often the seat of tuberculosis as any other bone of the body. The disease commences with an otorrhea, oftentimes of chronic character, beginning with hardly any pain and little discharge; rarely can the bacillus be demonstrated, but the ears go on in a comfortable way, but at the same time a persistently "running ear." The discharge never ceases. The case are very favorable for treatment. The temporal bone and the seat of the disease can be gotten at and the disease thoroughly eradicated and the patient benefited. I think in all cases of otorrhea the ears should be examined carefully with the view of their being of tuberculous origin.

Dr. E. E. Kelley, San Francisco.—There are two points I would like to call attention to. In the first place, we have to send away a good many of our patients. The point made by Dr. King that we must choose the place where they should go is very vital. Some patients had better be in low localities, some at the seacoast, and some in high altitudes. We must certainly study the patient, and send him to the climate for which he is specially adapted. Another point is this: Not only because of the danger of tuberculosis, but because of the danger of various other infectious diseases, there ought to be laws compelling the disinfection of tenement houses when people move out. They move out and do not disinfect the houses; other families move in and rapidly become subject to the disease. A very interesting illustration of this fact was published by the San Francisco Board of Health, in which there was a table of the cases occurring in Chinatown. Seventy-five per cent occurred within a few blocks, and other blocks were immune from the disease. This is a positive proof that the disease occurred in the same houses on account of their not being disinfected.

Dr. J. C. King, Banning.—Along the line of education of the public by the general practitioner, I would like to say that in the very small community in which I live, I think for several years there has not been a tuberculous patient who has died where the room and larger part of the premises have not been subsequently thoroughly disinfected. There is no law there, but it is simply a matter of cultivation and education of the people to that point. It has become such a necessary thing that one man has added to his business the necessary apparatus for disinfecting with formaldehyd. He charges so much per room for going around and attending to that business. and it

has become quite a source of income to him. In a little community where there is no health officer and no effort from officialism this illustrates how much can be accomplished.

Dr. George Blumer, San Francisco.—Just a word regarding Dr. Cole's remarks relative to statistics. Statistics have a place if properly carried out. With regard to the importance of the heredity of the soil. A number of papers have recently gone over this question. In a paper by Miller, while he does not entirely disapprove of heredity, he thinks more attention should be paid to contamination by contact. He shows that in families where the father is tuberculous, for instance, the chance of transmission of infection to the child is less; where the mother is tuberculous the child becomes tuberculous in larger proportion than where the father is tuberculous. The father is away most of the time, and not brought into contact with the child. Another question is early diagnosis in these cases; this has been impressed upon me by a large number of sputum examinations. The general practitioner, as a rule, expects to find typical bacilli in the sputum before making a diagnosis. In some of the large German sanatoria all the way from 60 to 80 per cent of cases coming in have no tubercle bacilli in the sputum. So that if you wait until the patient's sputum contains bacilli, you wait until the disease has progressed too far. They rely in these cases upon the physical signs and upon the tuberculin reaction.

Dr. F. M. Pottenger, Los Angeles.—I am glad that Dr. Blumer brought out his point with regard to early diagnosis. Early diagnosis has been one of my fads. I believe that the diagnosis of tuberculosis should be made by the clinical history and physical examination. It should be so made in a great percentage of cases. I do not believe in waiting for the microscope. The microscope has done great good, but on the other hand a great deal of harm, in the fact that it has made physicians rely upon it for diagnosis. Physical diagnosis has degenerated somewhat on that account. With regard to climate, there is no specific climate for tuberculosis. The best place for tuberculous patients is where they can have the most intelligent care, pure air and good food. I believe in climate; but everybody cannot take advantage of climate. If you can, go to a good climate; but it is not necessary to send the patient away from home. Regarding sanatoria for tuberculosis, I do not believe there is any better place anywhere than in a well-conducted sanatorium. I think that Dr. King has brought out that point. It is not every man who can start a sanatorium. The patients go to a sanatorium because of the man at the head of the institution. A man must throw his soul into the sanatorium to make it a success. Regarding the soil, the point is this: we should look more toward keeping the body in a high state of resistance. I believe in taking every precaution that can be taken. The French dispensaries have been a great success. A dispensary is really better than a sanatorium. Every city should have a municipal dispensary. With a campaign of education, teaching the people, then putting in sanatoria and dispensaries, I believe we can relegate tuberculosis to a thing of the past. House infection has been brought out. This subject has been studied in New York and Philadelphia. It is shown that there are certain houses which show infection within a certain time. These houses which show it, show cases coming up one after another for a long time. There are 325,000 rooms in Greater New York which have not a room or window for ventilation. San Francisco and Los Angeles will be just such places unless the medical profession take it into their own hands. The city council does not consider these things. The medical profession should guide the people in these matters of health.

THE ADVANTAGE OF MULES OPERATION OVER SIMPLE ENUCLEATION.*

By REDMOND PAYNE, M. D., San Francisco.

THE loss of an eye, because of its effect upon the general appearance of a patient is a great hindrance to him in almost every walk of life, so just as we succeed in making his appearance the more natural, we add vastly to his chances of success and happiness. After simple enucleation the orbit presents a large, deep cavity with great recession of the lids. There is a great deal of mucus secretion collected which cannot drain out; this macerates the lashes, and produces a more or less repulsive appearance. With the usual prosthesis this cavity is at best only partly filled. The enophthalmus is always apparent, frequently quite marked. There is always more or less collection of mucus and the mobility of the artificial eye is slight, while in children the development of the orbit is hindered.

Now when Mules operation is done, that is, the cornea amputated at the limbus, the sclera eviscerated and a vitrified glass ball enclosed, the orbital cavity is completely filled. There is an absence of enophthalmus, tears and secretion, the mobility of the eye is better than with any other method, and what is very important in the young, the orbit is said to continue to develop. The cosmetic effect is so vastly superior, either with or without the artificial eye in place, that I think this method should always be selected where there is no contra-indication.

The glass ball has been used some 15 years now and no case reported of its having been broken. The gold ball has no advantage, the silver ball produces argyria and the aluminum disintegrates, producing irritation, and is finally extruded. About the only absolute contra-indications would seem to be intra-ocular growths, eyes which have already excited sympathetic ophthalmitis and advanced atrophy of the globe. It has been used successfully in almost every other condition. Glaucoma seems no contra-indication judging from the cases reported; and in the hands of some, the results were highly satisfactory in suppuration of the globe. For the present, however, I think I shall regard this latter as a contra-indication. I have made the operation something like a dozen times now without failure—that is, regarding failure as the escape of the glass ball, sympathetic ophthalmitis, or an irritable stump, as these are the cases of failure so far reported. The escape of the glass ball is prevented, I think, by care in selecting the size, and adopting very simple operative technique, thus getting only slight reaction and less tension on the sutures. Sympathetic ophthalmitis has not happened with me, for I have been careful to keep well within the indications of the operation. The irritable stump which has happened with some operators seems to be due to the im-

* Read before the San Francisco Society of Eye, Ear, Nose and Throat Surgeons.

bedded sutures used to bring the scleral wound together. This I think I have avoided by using the silk sutures, bringing conjunctival and scleral wound both together, and using care to coaptate the cut edges of both. It heals readily, requiring ten days, and by that time many of the silk sutures have cut out. I have not found any occasion for the separate scleral sutures, hence there are none imbedded to produce an irritable stump.

The cases selected for the operation have been the following:

Case I—The whole cornea a large white cicatrix, following gonorrheal ophthalmia.

Case II—Hemorrhage glaucoma. Account of an old injury producing dislocation of the lens, traumatic cataract, etc. Eye continually painful. Not relieved by sclerotomy.

Case III—Old iridocyclitis. Painful, tender eye. No vision.

Case IV—Large staphyloma of anterior segment of eye protruding between lids.

Case V—Acute iridocyclitis due to slight blow to eyeball, one year after extracting piece of steel.

Case VI—Hemorrhagic glaucoma, due to recent blow upon the eye. Eye continually painful. Not relieved by sclerotomy.

Case VII—Large white cicatrix of cornea—strong convergent squint, producing much headache.

Case VIII—Extensive laceration of the anterior segment of the eye by wire; infected. No hope for a globe.

Case IX—Old iridocyclitis; but little vision. Eye painful. Inflammation recurrent.

There are two or three others, whose histories I cannot lay my hands on. I believe that Mules operation is not alone a justifiable procedure, but the one to be selected where no contra-indication exists, and that the more it is done the fewer failures we will have.

THE "GOOD THINGS" WE ARE!

The "patent" medicines sold to consumers will hold their own for a good many years to come, I believe. But the patent medicine of the future is the one that will be advertised only to doctors. Some of the most profitable remedies of the present time are of this class. They are called proprietary remedies. The general public never hears of them through the daily press. All their publicity is secured through the medical press, by means of the manufacturer's literature, sometimes gotten out in the shape of a medical journal, and through samples to doctors. For one physician capable of prescribing the precise medicinal agents needed by each individual patient there are at least five who prescribe these proprietaries. * * * The proprietary medicine of the future, though, will be advertised through these channels. The medical papers will reap the harvest, and the physician himself, always so loud in the denunciation of "patent" medicines, will be the most important medium of advertising at the command of the proprietary manufacturer. In fact, he is that to-day.—*Printers' Ink*.

[See editorial note, "Nostrums and Quacks," page 266.]

A recent investigation in Berlin shows that 60 per cent of the quacks who are doing good business were ordinary day laborers before they became so-called "benefactors of mankind"; that only 40 per cent had had an elementary common school education; that 85 per cent of the women had been servant girls, and that 30 per cent of the total number of quacks had criminal records.—Dr. O. T. Osborne, Address, A. M. A.

OPERATIVE FISTULÆ OF THE MALE URETHRA.*

By R. L. RIGDON, M. D., San Francisco.

IN OPERATING upon the male urethra through the perineum it has been my experience that a proportion of the patients do not make a wholly satisfactory recovery from the operation wound. In the large majority of cases the recovery is prompt and complete, but in rare instances delayed union is noticed, resulting in a fistula more or less persistent. This has come to me somewhat in the nature of a surprise, for from the reports of other surgeons it does not appear that fistula ever follows external urethrotomy. It is quite frequently mentioned as the result of an abscess, traumatism, tight stricture, etc., but does not seem to be credited as a possibility following operation. It is the purpose of this paper to present to you two cases illustrative of the condition mentioned.

In studying these cases I have endeavored to determine the cause or causes which have operated to produce the fistulae. It is well known that the escaping urine will follow the line of least resistance, whether this be through the natural channel, as is normally the case, or through accidental openings leading from the urethra. When an opening is made through the perineum into the canal it offers an easy line of escape for the oncoming flow, and the whole or part of the stream is diverted through this new channel. As union of the cut edges occurs and the opening becomes gradually smaller, the balance of resistance, which for the time has resided in the normal urethra, shifts more and more toward the artificial opening, until finally the urethra again offers the path of easier escape, and normal urination is established. Another factor to be taken into account is the direction of the stream in the urinary canal. The prostatic urethra is directed downward and forward, and is joined by the membranous urethra at a wide angle, and from this point the curve gradually passes forward and a little upward. The urinary stream following this canal will, because of its direction, tend to impinge somewhat upon the urethral floor, especially in the membranous portion of the canal; and if there is any breach of continuity in this locality, the urine will be directed toward it. Theoretically, then, a wound on the floor of the canal would be more readily kept open by the stream than would a similar opening on the upper wall.

The force with which the stream is delivered will, to a certain extent, determine the direction the stream will take. If the urine issues with considerable force, it will tend to shoot past any unnatural opening that may be present; but, on the other hand, if it is delivered slowly it will trickle into the mouth of a urethral wound, and find its way to the surface by the artificial route. The shape assumed by the urethral wound in process of healing may be such as to tend to direct the urine into its open mouth.

In the different portions of the canal the mucous and submucous tissues vary considerably in their degrees of firmness or laxity, as can be demonstrated easily by the endoscopic picture presented in the study of the normal canal. In one portion of the canal, especially the bulbous, the folding of the mucous membrane is very noticeable, while in the adjoining membranous urethra the tissues are much more tense. It is conceivable that an operative wound of the urethra might be located so that the urethral orifice would be at the junction of the membranous and the bulbous portions of the canal; and should a lax fold of the urethra in front of the opening rise up, as it does in the face of the endoscopic tube, it might easily tend to divert the urine into the unnatural opening. If in this supposed case there

*Read at the Thirty-fourth Annual Meeting of the State Society, Paso Robles, April 19-21, 1904.

should be a lack of force in the stream, from any cause, this tendency would be even more marked. Infection may play an important part in producing fistulae. Should the wound become infected, healing is delayed, and the formation of a false membrane is encouraged.

One other condition may be mentioned as perhaps tending to result in fistulae in these cases, namely, the use of the perineal drainage tube. Perineal drainage is very generally employed, and operative fistulae are very rare; hence I conclude that this cause is not a very potent one. I mention it, however, since it has occurred to me that the pressure of the tube on the surfaces of the wound might have a tendency to depress the posterior angle, where the pressure of the tube is naturally greater, below the level of the anterior angle, and so direct the stream of urine rather toward the wound opening and away from the urethra. It is possible, also, that if the tube is left in situ for any length of time the granulations forming around it may be covered with false epithelium, and in this manner prevent total closure of the wound.

Of course there are other causes that are influential in causing and maintaining general urethral fistulae; but in the class under discussion—operative fistulae—they need not be mentioned.

Case 1.—Mr. J., age 35, was operated upon for contracture of the vesical neck in October, 1902. The bladder was in a state of atony from frequent overdistention during the preceding months, and the urinary flow occurred in a very halting manner, even after relief of all obstruction. The patient went on to an uneventful recovery, and the perineal wound contracted until only a minute fistula remained; this has persisted to the present time. During February of this year I had an opportunity to examine this patient again. His general condition was good, but he complained of the escape of a few drops of urine through the perineal opening during the act of urination.

Only a few weeks before operating upon this patient I had operated upon another patient for a similar contracture, and after the third day urination through the normal channel was established, and thereafter no urine escaped from the perineal wound. The question naturally arose, Why should the wound heal so rapidly in one patient and be so long delayed in healing in the other? I satisfied myself that there was no obstruction in the anterior urethra in either patient, and also, by endoscopic examination, excluded any peculiarity in the position or condition of the urethral wound in the instance of delayed healing. I could find but two conditions that might account for the difference. In the patient mentioned as recovering so promptly no drainage tube had been used, and the bladder was of normal tone. In the instance of delayed union the drainage tube had been employed for ten days, and the bladder was in a condition of atony. In neither patient was there infection of the wound.

Case 2.—Mr. J. F., age 34. Operated upon for prostatic enlargement December 11, 1903, by the perineal method. The prostate was easily removed. A drainage tube was inserted through the wound and kept in situ for fourteen days because of the foul condition of the bladder. It was then removed, a catheter introduced per urethram into the bladder, and drainage established in that manner. The wound did not heal kindly, but the surfaces were covered with dirty grayish sloughs. These were thrown off gradually, and at the expiration of six weeks the perineal wound had contracted to the size of a large probe. This fistula has persisted to the present time. Only a small amount of urine escapes through it, but it is sufficient in quantity to greatly annoy the patient. The bladder has the power to expel its contents in a satisfactory manner, but there is some dribbling. Upon examination it is found that a small probe can be passed through the opening into the urethra, and that it is held quite tight by the constricting walls. The endoscope shows the position of the inner mouth of the fistula to be situated in the membranous urethra immediately adjoining the bulbous portion. The exact location is clearly determined when the probe is introduced, for with the endoscope its point can be seen emerging from the fistula. Just in front of the opening a fold of mucous membrane rises up, apparently offering a barrier to the onward flow of the urine. I am satisfied this is a normal fold of mucous membrane, but it stands

up so markedly as to suggest a casual relationship between its presence and the fistula. As mentioned before, there is present in this patient a tendency to dribbling of urine. I have thought that these slowly moving drops may be resisted in a small degree in their onward progress and forced, as it were, into the wound, thus retarding union. To the infection present for a time may also be attributed in part the reluctance to heal.

THE SYMPTOMS OF GLAUCOMA.*

By ALBERT B. MCKEE, M. D., San Francisco.

THE general symptoms of glaucoma are common to all varieties, but vary much in intensity and in the predominance of certain symptoms over others, according to the type of the disease. The general division of glaucoma into primary and secondary is a natural one, while the subdivision of the former into acute, fulminating, sub-acute and chronic is more or less artificial, but conduces to a better understanding of the disease and a more correct application of the treatment. Secondary glaucoma occurs as the result or in the course of some other disease, causing damage to the eye and giving rise to increased tension and other symptoms, and tending to simulate, according to its intensity, one of the forms of primary glaucoma; hence its symptomatology needs no special description.

The various subdivisions of primary glaucoma are but estimates of the relative severity or chronicity of its course. Most authors describe a prodromal stage of acute glaucoma, the symptoms of which resemble those of the simple form. The prodromal stage is characterized chiefly by attacks of obscurity of vision. The patient states that, during these attacks, he seems to see through a veil of mist or smoke. He notices that the lights seem to be surrounded by the colors of the spectrum. Accompanying these phenomena the patient experiences more or less sensation of pressure or a dull pain in the affected eye. Upon examination the cornea is found to be slightly opaque, especially in the center; the vision somewhat reduced, the anterior chamber a trifle shallow, the pupil somewhat dilated and reacting less promptly. The tension of the eye is noticeably increased. Frequently slight ciliary injection is present. The symptoms disappear after a few hours, and the eye returns to its former condition. The intervals between the attacks vary greatly, but become shorter. The origin of the attacks is often directly traceable to overexertion, late hours, overuse of the eyes, excesses in eating or drinking, and the symptoms often disappear after a rest. Notwithstanding the apparent return of the eye to normal, the patient finds a rapid increase in his presbyopia, and is compelled to make much more frequent changes of glasses than before the attacks. Without becoming sufficiently violent to constitute acute glaucoma, the attacks may recur with increasing frequency, so that the eye has no time to return to its normal condition, and a state of chronic inflammatory glaucoma follows. The usual sequel to these prodromal attacks is that of acute glaucoma. The attack comes on suddenly after the prodromes have lasted for many weeks, months or years. The acute attack may be precipitated by the causes which led to the prodromal attacks, by anything producing venous congestion or by dilatation of the pupil.

The onset is accompanied by severe pain in the eye, radiating thence to the head and face or to any part supplied by the first and second branches of the trifacial nerve. The attack is often mistaken for some gastric disorder by reason of the nausea, vomiting and fever accompanying it, and the eye condition may be overlooked. The ocular conjunctiva becomes injected, even chemotic. The edema may extend to the lids. The cornea is hazy, and presents a steamy appearance, the anterior chamber is shallow, the

*Read by Dr. B. F. Church at the Thirty-fourth Annual Meeting of the State Society at Paso Robles, April 19-21, 1904.

pupil dilated, irregular and immobile, the iris is discolored by congestion, the tension of the eye is greatly increased. The congestion of the eye, owing to its venous character, is dusky. The cornea becomes anesthetic. Owing to the opacity of the media the fundus cannot be seen.

The prodromal attacks differ only in degree but not in character. Even after a severe attack the eye may return to normal, but after a longer or shorter interval other attacks follow, the vision remains obscured, the tension continues above normal and the eye takes on the glaucomatous appearance. Unless the attack be of short duration, permanent changes take place. The eye, while it loses much of its redness, shows some dilatation of the anterior ciliary veins, the chamber remains somewhat shallow, the iris loses its normal texture and appears atrophic, the pupil is slightly dilated and irregular, and reacts less promptly. The pigment border of the iris seems broader and more prominent by reason of the atrophy of the iris, the tension remains slightly fuller than normal. An examination of the fundus immediately after the attack, unless the prodromal symptoms have been prolonged, shows only hyperemia about the entrance of the optic nerve. Subsequent attacks are apt to be less severe as far as the pain is concerned, but with each one the vision is still further reduced until absolute glaucoma is present. The latter is characterized by the bluish-white sclera over which course the dilated anterior ciliary veins. The cornea is anesthetic but transparent; the iris is reduced to a small stripe, which almost disappears at some points. The chamber is shallow, the bulbous stony hard, a greenish reflex comes from the background, the disk is deeply excavated. Glaucomatous degeneration follows. The cornea becomes opaque, its surface roughened, even vesicles may appear upon the surface, ulceration, with perforation and severe hemorrhage, may ensue. The sclera becomes thinned and staphylomatous, the lens is opaque eventually, atrophy of the globe or panophthalmitis and phthisis follow. The patient obtains no respite from his troubles until the globe has shrunk.

When the symptoms assume an exceedingly acute character, blindness resulting in a few hours, the disease is termed glaucoma fulminans. Frequently the disease is not accompanied by the typical acute attacks, but passes from the prodromal stage into the chronic inflammatory form. The attacks, while much less severe, follow each other rapidly, so that the eye makes no return to the normal, but goes steadily downward.

Glaucoma simplex, or non-inflammatory glaucoma, is marked by the absence of all inflammatory symptoms. The rise of tension is gradual, or may be present at short periods, so that it entirely escapes the examiner. In such cases the diagnosis is often made with difficulty. The anterior ciliary veins are usually slightly more prominent. If the tension be increased, it may be accompanied by slight haziness of the cornea. The vision fails gradually, beginning on the nasal side, though exceptionally the defect may be a concentric shrinkage of the field or a paracentral scotoma. The subjective symptoms consist almost entirely in the disturbance of vision and fleeting attacks of obscurity of sight. The central vision may remain good for a long time and the defect may be overlooked unless the patient be tested with a lessened illumination.

The diagnosis is to be made chiefly on the ophthalmoscopic findings, although these are often far from typical. The disk is white or grayish, more or less excavated, its sides even undermined, so that the vessels bending over the disk margin disappear under the overhanging edge. The arteries are somewhat diminished in caliber, the veins are full and dark. Pulsation of the arteries is present or readily produced by slight pressure on the globe, and the ves-

sels are pushed over toward the inner side of the disk. Around the disk is a pale zone, the glaucomatous halo. The choroid shows signs of atrophy, the larger vessels appearing with distinctness, and giving the fundus a tessellated appearance. Hemorrhages may be present in any type of the disease, from the violence of the inflammation, the increased tension or, in the late stages, from degeneration of the vessels.

Both eyes are generally affected by glaucoma, either simultaneously or at different times, though the type of the disease may differ in the two eyes or the character of the attacks be quite different.

[For discussion see May JOURNAL, page 158.]

PUBLICATIONS.

International Clinics. Philadelphia: J. B. Lippincott Company. Vol. 2 of the Fourteenth Series of "International Clinics" has been received. This volume is in every respect up to the usual degree of excellence that this series has maintained for thirteen years, and certainly the editors' aim at the time of the inception of the work, in 1891, to "make this periodical a complete post-graduate course of medical instruction" has been realized. It would be impossible within the space allotted to a review to dilate on the individual excellencies of many of these articles. The careful physician is going more and more to monographs on special subjects for his reading matter. Superficial literature in book form appealing to the "busy practitioner" has not filled the needs for which it was intended. In this series of monographs and clinical lectures, however, the physician finds a concise yet comprehensive treatise on the subjects considered, and it is filling a want not supplied elsewhere.

Anatomy and Surgery of the Knee-Joint is the principal article in the July number of *Annals of Surgery*, and is illustrated in the lavish manner customary with the *Annals*. Another paper of great interest, and also well illustrated, is on "Primary Sarcom of the Spleen," an exceedingly rare condition.

The American Journal of Obstetrics for July publishes the paper by Dr. Kreutzmann on "Transverse Suprapubic Division of the Skin Applied for the Simultaneous Performance of Intra-Abdominal Work and of Inguinal Shortening of the Round Ligaments," read before the Academy of Medicine some time since, and abstracted in the JOURNAL at the time.

The Virginia Hospital Bulletin is a new journal which started publication in July. It is to be a "quarterly journal of medicine and surgery," issued by the staff of the Virginia Hospital, Richmond, Va. It has an exceedingly awkward shape, and the length of the lines is six inches; too long by at least two inches. The strain upon the eye muscles in following a line of this length is easily perceptible to almost anyone, and is disastrous to one whose muscles are a bit weak.

Longer Medical Course.—It is estimated that there are more than 6,000 physicians in London alone, and the total for Great Britain and Ireland comes to 37,730. The doctors increase at the rate of about 400 per annum. Great as this increase is, it was more than double that number some years ago, before the course of study was lengthened from four years to five.—*Medical Times*.

Pan-American Congress.—The next meeting of the Pan-American Medical Congress will be held in Panama in December. The congress meets every three years. The first session was held in Washington in 1893, the second in Mexico in 1896, but the 1899 meeting was given up on account of war in Venezuela, where it was to have met, and the next one was in 1901, held in Cuba.

COMMUNICATIONS.

THE A. M. A. FINANCIAL STATEMENT AGAIN.

To the Editor of the STATE JOURNAL: I was very much surprised by the editorial in the August number of the JOURNAL commenting upon the report of the Trustees of the A. M. A. At first I thought you certainly had made a grave error, for it seemed quite impossible that the *Journal of the A. M. A.*, carrying as it does such a large amount of advertising, and having such a tremendous circulation, could possibly be running behind. I have made a very careful study of the report, and while I may say that I think I can see the mistake in your reasoning, the whole report is a most curious document, and becomes more perplexing as one devotes more time to its study. Your error lies in the fact that you seem to take it for granted that all the members would pay their \$5.00 dues if they did not get the *Journal*. The Trustees, on the other hand, seem to regard the amount for dues merely as so much money paid for the *Journal*, and in fact give the impression that the great American Medical Association is merely a sort of small adjunct to the *Journal*—existing only for the purpose of getting subscribers to that most excellent publication. But even granting that such is the case, how does it happen that the amount received from dues is \$63,237.48? The dues are \$5.00, which would indicate a membership (paid) of 12,647.496; who is the unfortunate person who is only .496 of a member? On page 1638 is the following table:

Association net profit.....	\$40,488.68
Association expense	\$6,629.80
Organization expense	5,323.19
	11,952.99
	\$52,441.67
Less interest on bonds....	\$560.00
Net income on houses.....	1,400.34
	1,960.34
Journal profit, 1903.....	\$50,481.33

They start with some \$40,000 Association profit, yet close their statement with over \$50,000 Journal profit, four-fifths of which is already given, not as a Journal profit, but as an earning of the Association. But in any event, and aside from whether you are right in your contention or not, it appears that we members of the Association are paying about \$3.50 a year more dues than we should; for certainly that much of our \$5.00 seems to be going into a "sinking fund," for what purpose no one whom I have asked seems to know. Can you tell me what good this money is doing or is going to do? Or can you give me any reason why we should not demand that our dues be reduced, or retire from affiliation with the Association? If you insist, you may publish my name, but I would rather you did not. Very respectfully,

X. Y. Z.

PLEASE HELP!

To the Editor of the STATE JOURNAL: Can you tell me why the following names are not to be found in the Register and Directory published by the society? I noticed them in a recent number of the *Southern California Practitioner*, and looked for them in the Register. I could not find them, and so turned back to the last edition of the old Register, published in 1902, but could not find them in that, either: Dr. J. I. Clark, Santa Ana; Dr. C. H. Rowell, from San Francisco to Fullerton; Dr. J. F. Spencer, from Los Angeles to Gardena; Dr. John Y. Oldham, from Kentucky to Los Angeles; Dr. E. E. Selleck, from New Mexico to Los Angeles. I am not particularly interested in these men, but if they are licensed to practice in California,

why are not their names in the official Register? Respectfully,

A MEMBER.

[I have looked up the names as given by "A Member," but cannot find them. Why they are not to be found in either of the last two editions of the Register, I cannot say. It may be for any one of a number of reasons. Possibly they have no license to practice; perhaps they took out a license years ago, and have just come to the state. The real reason is, however, that co-operation on the part of physicians themselves is not what it should be. If every doctor in the state would take the time and the trouble to let us know as soon as a new doctor appeared in his section, it would be but a very short time till we had all this confusion entirely cleared up, and could say at once just "who's who." There is absolutely no way of getting this matter definitely straightened out unless each and every member of the society will help us with the work.—Ed.]

INTERNATIONAL CONGRESS.

To the Editor of the STATE JOURNAL: The flight of time admonishes us that we are surely and swiftly nearing the date of the Fifteenth International Congress of Medicine, to be held in the latter part of April, 1906, at Lisbon, Portugal. In view of that fact the enclosed circular, which was sent by the learned, efficient and amiable Secretary-General of the Congress, Professor Miguel Bombarda, to many members of the profession in various parts of the world, is particularly opportune. The information contained therein seems to be of sufficient moment to entitle it to space (as there requested) in the next number of your valued JOURNAL, in the interest of the profession on this coast, many of whom, it is hoped, may find time and leisure to attend the congress and to visit the land of Pombal, Camoëns and Albuquerque. Hoping that you may see your way clear to comply with the request made, I remain, my dear colleague, yours fraternally,

ALFRED E. REGENSBURGER.

INERT DRUGS.

To the Editor of the STATE JOURNAL: I do not see why C. S. H. (communication Vol. II, No. 6) should have singled out digitalis in fluid extract as unreliable, allowing the readers of his letter to infer that other galenicals were less uncertain in strength and action. Do any up-to-date physicians use extract or tincture of cinchona when they wish to exhibit the antiperiodic effect associated with the action of its active principle, or do they use tincture of opium when the effect of morphin upon peristaltic action is desired? Probably not; but many do prescribe fluid extracts or tinctures of veratrum, digitalis and pilocarpin. The virtue of any tincture, fluid extract or other preparation, depends upon the amount of the active principle of the substance from which it is prepared, and as no two lots of leaves, bark, roots, buds or twigs contain the same proportion, nor any two manufacturers produce fluid extracts or tinctures which are absolutely alike in active principle strength, it should occasion little surprise if we were all therapeutic nihilists. That there are reliable preparations of the active principles of such plants as are used in medicine seems known to most physicians, but the inertia of conservatism renders the extension of the list very slow. Aconitin, aloin, anemonin, apocynin, arbutin, atropin, berberin, brucin, cactin, caffein, cicutin, cocain, codein, colchicin, digitalin, emetin, ergotin, gelsemin, heroin, hydrastin, hyoscyamin, hyoscin, iridin, morphin, picrotapin, pilocarpin, podophyllin, quassin, quinin, santalin, strychnin, veratrin, represent many of the active principles of the drugs we use, and have the advantages of reliability, permanence and certainty of action; with greater accuracy of dosage; when liquid

medication is preferred, a specific quantity may be dissolved in any appropriate vehicle. But in using these preparations with best effect accurate diagnosis becomes necessary. When conditions require the action of digitalis, the exhibition of the glucosid, digitalin, in proper dosage will produce the results desired, and proper dosage of any of the active principles means "to effect"; in practical application this amount is best determined by small doses frequently repeated until the desired result is attained or the physiological effect of the drug is manifested. The same lack of reliability complained of in the fluid extract of digitalis has been noted recently in tinct nuxvomica and tinct of opium by articles in medical journals, and I have had personal experience with tinct aconite and wine of ipecac, being absolutely inert.

W. S. FOWLER.

INTERNATIONAL CONGRESS OF MEDICINE.

"We have received the first number of the Journal of the XVth International Congress of Medicine, that will take place in Lisbon on the 19th-26th of April, 1906. This number contains the statute of the Congress, the organization of the sections and of the national committees of the different nations. One must remark in the statute the second article, that only admits in the Congress, beyond the doctors, the scientific men presented by the national or Portuguese committees. The contribution is of 25 francs or 20 marks or £1. The work of the Congress is distributed in seventeen sections: 1. Anatomy (descriptive and compared anatomy, anthropology, embryology, histology). 2. Physiology. 3. General pathology, bacteriology and pathological anatomy. 4. Therapeutic and pharmacology. 5. Medicine. 6. Pediatrics. 7. Neurology, psychiatry and criminal anthropology. 8. Dermatology and syphilography. 9. Surgery. 10. Medicine and surgery of the urinary organs. 11. Ophthalmology. 12. Laryngology, rhinology and stomatology. 13. Obstetrics and gynecology. 14. Hygiene and epidemiology. 15. Military medicine. 16. Legal medicine. 17. Colonial and naval medicine.

"The executive committee of the congress has the intention to print, before the reunion, all the official reports; it is necessary that they shall be given before the 30th of September, 1905, to the general secretary. For the free communications it is necessary that they should be given before the 31st of December, 1905, if the authors want that the conclusions should be printed before the opening of the congress.

"The official language is the French. In the general assemblies, as in the sections, English, German and French may be used. We see that the committee of the Congress has excluded the Portuguese from the languages permitted; this has only been done with the intention of diminishing the number of languages spoken; there can be no jealousy, when the legislator begins by sacrificing himself.

"The president of the committee on organization is the Doctor M. da Costa Alemão; the general secretary is the Doctor Miguel Bombarda; all the adhesions [sic] must be addressed to this doctor (Hospital de Rilhafoles, Lisbon)."

Religious Papers and Alcohol. A pretty consistent picture do these two portions of the average religious paper present—advocating, with one hand, alcoholic prohibition, or temperance, and receiving, with the other hand, money for advertising—and thereby recommending to their readers—preparations filled ten times over with more alcohol than the beer which fills them with so much horror in the editorial columns! There are no papers published that are so flagrantly guilty of admitting to their columns the advertisements not only of alcohol-filled medicines, but preparations and cure-alls of the most flagrantly obscene nature, as the so-called religious papers of this country.—*Ladies' Home Journal*.

PERSONALS.

Dr. Albert Fouch, formerly of North San Juan, has located in Sutter.

Dr. A. A. O'Neill has moved his office to 502 Sutter street, San Francisco.

Dr. Benjamin A. Mardis has left Placer county, and is located in San Francisco.

Dr. George F. Reinhardt, of Berkeley, has returned from his summer trip to Europe.

Dr. John Stille has left San Francisco, and is now located in Alturas, Modoc county.

Dr. J. A. Andrews, of Santa Barbara, has gone to Europe for a few months' vacation.

Dr. William H. Flint, of Santa Barbara, is spending his vacation with his family, in Connecticut.

Dr. Walter I. Sunburnt, formerly of 224 Eleventh street, San Francisco, has moved to Nevada county.

Dr. George F. Wells, formerly of Booneville, Mendocino county, has located at Geyserville, Sonoma county.

Drs. S. E. Simmons and F. X. Voisard, of Sacramento, were in San Francisco for a short time early in August.

The engagement of Dr. William Lemoyne Wills to Miss Susie Patton, both of Los Angeles, has been announced.

Dr. A. F. Maine of Redwood City has gone East to take a post-graduate course, and will visit the fair at St. Louis on his return.

Dr. Francis M. Pottenger, of Monrovia, was in San Francisco early in August, attending the meeting of the Board of Examiners.

Dr. S. B. Gordan, of Salinas, has returned from his visit in the East, and stopped in San Francisco for a few days on his way home.

Dr. James M. French, who passed the state examination in December, 1903, has located at San Diego, and joined the County Society.

Dr. Ernest Bryant and Mrs. Bryant (who was Miss Susie Bixby until July) were in San Francisco for the closing days of their honeymoon.

Dr. Margaret Mahoney has returned from her studies in Europe, and is located at 1135 Polk street, San Francisco. Office hours, 3 to 5 P. M.

Dr. Fred B. Sutherland has not moved his office from the Starr King Building, as reported (through an unfortunate error) in the last number of the JOURNAL.

Dr. John C. King, of Banning, was in San Francisco for a few days during the early part of August, attending the meeting of the State Board of Medical Examiners, of which board he is a member.

Dr. Emmet Rixford, of San Francisco, was elected president of the American Surgical Association at its recent meeting in St. Louis. The next meeting of this association will be held in San Francisco.

Dr. Ray Lyman Wilbur, formerly assistant professor of physiology at Stanford University, has resigned his position, and will devote his time to the practice of medicine at Stanford. Dr. Wilbur has recently returned from a year's study in Europe.

Dr. Mary B. Ritter, of Berkeley, was seriously injured in an accident near New Almaden, August 15th, and was removed to San Jose for attention. Professor and Dr. Ritter were returning from the quicksilver mines at New Almaden when their horse became frightened and ran away. Dr. Ritter was thrown against the rocks, and her collar-bone and two ribs were fractured.

In prescribing unofficial preparations physicians are very liable to be prescribing only a name with no guarantee that the name stands for anything definite either in number, quantity or quality of ingredients. Facts of this kind have long been known, or at least surmised, by physicians, and their confidence in modern pharmacy has been almost shattered.—*Journal A. M. A.*

STATE EXAMINATIONS, JULY AND AUGUST, 1904.

The following tables give the result of the two recent examinations, the one held at Los Angeles, July 12th, 13th and 14th, and the other at San Francisco, August 2d, 3d and 4th. Those marked (*) are here noted as coming before the board a second time, and (**) a third time, or second reexamination. Due precautions were taken to prevent any "cribbing" or cheating during the examinations. Of course, some of those who were rejected are bitterly complaining, but those competent to pass an opinion say that the examinations were at least fair, and in some cases absurdly easy. One examiner, at least, asked a couple of questions which he himself could not answer; but that is to be expected. The location of the "cerebro-spinal center" would be a difficult matter, while to properly "describe the human nose," in all its features, attributes and variations, would take some time!

There is one thing which the board should by all means do—it should abolish the possibility of any examiner identifying any candidate's papers. This can easily be done by having the candidate deposit his papers in a box, like a ballot box, instead of handing them to the examiner as he leaves the room.

For the ensuing year the board is organized as follows: L. A. Perce (E.), Long Beach, President; W. S. Thorne, San Francisco, Vice-President; Charles L. Tisdale (H.), Alameda, Secretary; Dudley Tait, San Francisco, Treasurer; E. C. Buell (H.), Los Angeles; A. L. Cothran, San Jose; J. C. King, Banning; J. B. Mitchell (E.), San Francisco, and George F. Reinhardt, Berkeley. The office of the board is room 14, 530 California street, San Francisco.

July Examination, Los Angeles.

Passed.

University of Southern California	(1903) 86%, 82%, (1904) 79%, 88%, 77, 82%, 81%, 79%, 81%, 86%, 78%, 85%, 79%, 79.
Northwestern University, Ill.	(1904) 86, 86%
Rush Medical College, Ill.	(1878) 75; (1903) 86%
University of Buffalo, N. Y.	(1899) 84%
University of Kharkow, Russia	(1894) 75
Columbia University, N. Y.	(1901) 89%
Medical Department Univ. Louisville, Ky.	(1892)*78%
University Vermont	(1890)*86%
Ohio Medical College	(1883) 75
Univ. of the City of New York	(1880) 84%; (1886) 80%
Johns Hopkins, Md.	(1901) 85%
Illinois Medical College	(1903) 75
University of Indianapolis, Ind.	(1904) 81%
Starling Medical College	(1887) 75
Trinity University, Canada	(1904) 80%
California Medical College	(1904) 82%
University Pennsylvania	(1884)*77%
Chicago Medical College, Ill.	(1869)*81%
College of Physicians and Surgeons, Ill.	(1904) 79%
Missouri Medical College	(1881) 78
Laura Memorial Woman's College, Ohio	(1902) 76%
University of Dublin, Ireland	(1878) 75
Western Pennsylvania Medical College	(1889) 75

Conditioned.

University of Louisville, Ky.	(1902) 79%
Marion Sims College of Medicine, Mo.	(1891) 77%
College of Physicians and Surgeons, Cal.	(1903)*78%
University of Southern California	(1904) 76%, 84, 75%, 75, 80%, 81%, 84%, 82%.
University of Minnesota	(1897) 77%
Vanderbilt University, Tenn.	(1898) 75%

Failed.

University Medical College, Mo.	(1904) 72
University of Southern Tennessee	(1895) 66%
Eclectic Medical Institute, Ohio	(1904) 72%
Rush Medical College, Ill.	(1902) 66%
Jefferson Medical College, Pa.	(1892) 59%

University of Southern California	(1904) 74%, 70%, (1903) 74%.
Missouri Medical College	(1898) 69%
Iowa State University	(1897) 64%
University of Michigan	(1882)*74
Cleveland College of Physicians and Surgeons, Ohio	(1895) 69%
Kentucky School of Medicine	(1885) 65%

Passed, 39; conditioned, 13; failed, 13.

August Examination, San Francisco.

Passed.

Cooper Medical College, Cal.	(1904) 86%, 85%, 79, 82%, 79%, 90, 85%, 79%, 82%, 82%, 80%, 84%, 85%, 81%, 86%, 80%, 80%, 84%, 79%, 81%, 86%, 79, 87%, 78, 78%, *78%, (Saginaw Medical College, 1901), 86%.
College of Physicians and Surgeons, Cal.	(1902) *79, **75%, (1904) 77%, 82%, 80%, 75%, 75%, 85.
University of California, Medical Department	(1898) 82%, (1903) 80%, (1904) 81%, 80%, 87%, 85, 82%, 88%, 81%, 81%, 83, 80%, 81%, 82%, 81%.
Rush Medical College, Ill.	(1881) 75%, (1897) 77%, (1899) 77%.
University of Basel, Switzerland	(1896) 80%
Jefferson Medical College, Pa.	(1903) 83
University of Leipsic, Germany	(1900) 80%
Northwestern University, Ill.	(1897) 83%
University of Denmark	(1894) 80%, (1902) 78%
Albany Medical College, N. Y.	(1895) 82%
California Medical College	(1904) 80%
Wooster University, Ohio	(1880) 77%
University of Minnesota	(1901) 82%
Long Island College Hospital, N. Y.	(1899) 79%
College of Physicians and Surgeons, Ill.	(1896) 76%
Trinity University, Canada	(1901) 80%

Conditioned.

Cooper Medical College, Cal.	(1902) 77%, (1903) 78%, (1904) 83%, 81.
College of Physicians and Surgeons, Cal.	(1904) 75%
California Medical College	(1904) 76
Chicago Homeopathic Medical College, Ill.	(1904) 75%
University of Texas	(1896) 76%
Harvard University Medical School, Mass.	(1903) 80%
Creighton Medical College, Neb.	(1904) 80%

Failed.

California Medical College	(1904) 70%
Cooper Medical College, Cal.	(1904) 63, 74%, 72
College of Physicians and Surgeons, Cal.	(1902) 66%, *66; (1904) 67%, 74%, 74%, 73, 69%, 59%, 73.
University of California, Medical Department	(1904) 72.
Central College of Physicians and Surgeons	
Ind.	(1886) 61%
Rush Medical College, Ill.	(1880) 70%
Laral University, Canada	(1900) 67
Northwestern University, Ill.	(1904) 72%
Dartmouth Medical College, N. H.	(1900) 70%
Tulane University, La.	(1895) 73%
National University, D. C.	(1887) 42%
Starling Medical College, Ohio	(1903) 65%
Escola Med. Cir. de Lisbon, Portugal	(1896) 68%
Maine Medical College, Ohio	(1904) 72%
University of Minnesota	(1901) 67%
Hahnemann Medical College, Cal.	(1903) 67%

Passed, 67; conditioned, 10; failed, 26.

Of the graduates of California schools, 94 seem to have come before the board in these two examinations. The results are as follows:

Cooper College—Passed, 27; conditioned, 4; failed, 3.

College of Physicians and Surgeons—Passed, 8; conditioned, 2; failed, 9.

University of California—Passed, 15; conditioned, 0; failed, 1.

University of Southern California—Passed, 14; conditioned, 8; failed, 3.

MEDICAL SOCIETY MEETINGS.

Alameda County.

The regular meeting for August was held on Tuesday, the 9th, the president, Dr. Maher, in the chair. Dr. Hubert Rowell, of Berkeley, read a paper on the subject of "Meningitis," in which he discussed the various forms of inflammation of the membranes of the brain, their causation, symptomatology and treatment; he gave the history of several cases that had come under his personal observation. The paper was comprehensive and scholarly, and elicited considerable discussion from the members present.

Dr. Dukes read a paper on the subject of "Normal Labor in Private Practice," in which he discussed, in a practical way, the duties of the physician to his patient, and of the patient to her physician, during the period of utero-gestation, and outlined the technic of managing a normal labor. He laid special stress upon the care of the patient during the months of her pregnancy, and exhibited a pamphlet which contained in concise form instructions for the pregnant woman. This he had had printed, and it is his custom to present a copy to his patients early in their pregnancy. He stated that it was usually appreciated by them, and was of considerable service to them.

J. M. SHANNON,
A. S. KELLY,
Publication Committee.

Orange County.

The Orange County Medical Association met in regular session on the evening of Tuesday, August 2d. Eight members and one visitor attended the meeting; several of the members and regular attendants being away on their summer vacation. Dr. Dobson read the paper of the evening on the subject of "Middle Ear and Allied Diseases," which was discussed by those present. The meeting for September will be devoted to the presentation of patients and report of cases, this program having been arranged owing to the fact that several of the members will probably be in San Francisco attending the Conclave.

H. S. GORDON.

San Francisco County.

The San Francisco County Medical Society met on August 9th, the president, Dr. Rosenstirn, in the chair. Dr. Harry M. Sherman presented a patient exhibiting a very interesting condition. When first seen the boy had a sinus running into the thorax on the left side, and it was not known whether there was a piece of drainage tube in the wound or not. The sinus opened at about the left nipple and extended upward, entering the thorax between the first and second ribs. Operation was decided upon, and it was determined to remove as much of the ribs as possible, and thus allow the chest wall to close down upon the remains of a perfectly useless lung. A long piece of drainage tube was found. The second, third and fourth ribs were removed in about half their extent, commencing at the angle of the ribs posteriorly. The periosteum was allowed to remain in order to permit bone reproduction and secure added strength of the torso. The operation had to be abandoned temporarily on account of the condition of the patient. It was subsequently completed. The patient was shown. The chest wall was provided with a hard covering, owing to the new bone thrown out by the periosteum.

Dr. A. B. Grosse exhibited a patient having true lupus, or tuberculosis of the skin, on the face. He stated that the patient had been subjected to all known treatments during a period of more than ten years. The patient had been under treatment for twenty days by the London lupus lamp and radium of

high potential. Dr. Grosse said that he had found that, as already stated by him before the society, the lupus lamp was of little or no value in deep-seated lesions. The tubercles were apparently unaffected by exposure to it, in the present case, while, on the contrary, exposure to the radium produced a marked result.

A symposium on tuberculosis was next opened by Dr. William Fitch Cheney, who discussed the "Early Diagnosis of Tuberculosis." Dr. Cheney dwelt with special emphasis upon the fact that the greatest care and patience must be exercised and repeated examinations made in order to make the diagnosis at a time when it is of most value to the patient. After bacilli appear in the sputum, the case has reached a dangerous stage of advancement; to help the patient most, diagnosis must be made by the compilation of a large number of little points which, taken together, make up the evidence. He emphasized the fact that the text-book picture of tuberculosis is that of advanced rather than early manifestation of the disease, and hence is dangerously misleading. The whole history should be carefully taken, and especial effort should be made to elicit information as to the patient's exposure to contact with tubercular individuals, rather than to the unimportant fact of deaths, in his family, of individuals with whom he did not come in contact. The temperature should be taken every two hours for at least two weeks in order to be of any value. The chest should be examined with all the clothing removed. There is apt to be little or no sputum, and potassium iodid is valuable, as it tends to produce some which may be used for examination. Bacilli in the sputum should not be expected to aid in the early diagnosis. The tuberculin test is of questionable value, as is also the use of the X-ray. In conclusion he pointed out the three things which should be avoided in making a diagnosis: First, a preconceived idea of the examiner; second, lack of care in the minor details of examination; third, lack of persistence in keeping at the examinations until a diagnosis is satisfactorily made.

Dr. George H. Evans spoke of "Prevention." He deplored the actions that had produced phthisiophobia, believing quarantine to be useless and foolish. Anti-spitting ordinances well carried out would do much good. Thorough disinfection and renovation of all premises in which persons had died of the disease, should be enforced. Notification should be required, not for purposes of quarantine, but to educate the patient and his family. Education he considered of the greatest value. Dispensaries for the poor should be provided. He estimated the yearly loss to the state, from tuberculosis, at approximately \$3,240,000. Sanatorium treatment he considered of the first value, and climatology of relatively little importance. Cow's milk is undoubtedly a common source of infection in infants, and should be guarded against.

Dr. Albert Abrams discussed the question of "Treatment," and considered early diagnosis as the most important element. The patient exhibiting suspicious symptoms should be regarded as tuberculous until proven otherwise. The bacilli he considered of minor importance in the production of the disease, the poor physical condition being the main factor. He regarded the results of sanatorium treatment as not so good as those secured by extra-sanatorium treatment. He advocated life in the open air, in a tent, etc., and proper forced feeding as the principal agents in treatment. He said that any climate is right; that location makes no difference; that all that is required is equable temperature, dry, pure air, and plenty of sunshine.

Dr. William W. Kerr opened the discussion. He said that one should not wait for the bacilli to appear in the sputum before making a diagnosis. That too many men depended too much upon the bac-

teriologist for their diagnoses. In regard to notification he asked what could one base his diagnosis on before the bacillary stage. The physician might be sure of his diagnosis, but unable to absolutely prove it. He considered both sanatorium treatment and forced feeding as more or less in the nature of fads, and perhaps somewhat abused.

Dr. Henry Gibbons, Jr., said that the open-air treatment seemed to be regarded as a new thing, whereas it really is not. He said there were a number of persons still living for whom his father had prescribed the open-air treatment twenty-five or thirty years ago.

Dr. Henry Harris mentioned the value of percussion in making out the transverse diameter of the apex.

Dr. Philip K. Brown thought the X-rays of little or no value in making an early diagnosis. He referred to animal tuberculosis, and mentioned two cases that had come within his experience in which a cat and a dog had acquired the disease from human patients. He valued highly the open-air treatment, but could not follow Dr. Abrams into the tent, as he considered it the worst possible sort of habitation.

Dr. J. Henry Barbat said that the disease did not always start in the apex, and that it should be looked for elsewhere. He considered the X-rays as very valuable in making a diagnosis.

Dr. Kaspar Pischel called attention to the recent statement of Wood of Philadelphia, to the effect that he had found bacilli in a large number of tonsils removed from patients who were not tubercular. He called attention to the fact that tuberculosis of the larynx had been cured. He emphasized the importance of proper breathing, etc., and stated that the nose and throat should be carefully examined and any deficiencies attended to.

Drs. Cheney, Evans and Abrams closed the discussion.

On motion, the recommendations of the special committee on prosecution of illegal practitioners were referred to the executive committee, with power to act. On motion of Dr. Kenyon the sum of \$200 was appropriated for the Walter Reed memorial fund.

The following doctors were elected to membership in the society: J. de Chantreau, F. K. Ainsworth, Louis I. Breitstein, D. F. Ragan, Adolph Baer, Henry du R. Phelan, H. T. Rooney, J. H. Soper, C. S. Downes, C. E. Beebe, Caroline Rosenberg, Grant Selfridge, Abel W. Johnson, Theodora Vassault, Cullen E. Welty, Emil U. Torello.

Santa Barbara County.

The Santa Barbara County Medical Society held its regular meeting for the month of July in the parlor of the Arlington Hotel, Santa Barbara. The meeting was called to order by the president, Dr. Charles Anderson, and the following members were present: Drs. W. F. Blake, D. Conrad, W. B. Cunnane, L. F. Mansfield and C. S. Stoddard. Dr. Blake reported a very interesting case of "What is it?" A child, without any subjective symptoms whatever, family history negative, playful and apparently in a perfectly normal condition except for a rise of temperature for ten days, ranging from 101° in the morning to 104° in the evening. Physical examination negative; microscopical examination of secretions, negative. No apparent result from antipyretics or bathing. Dr. C. S. Stoddard read the paper of the evening, entitled "Obstetric Hints." The paper was based upon his personal experience, and was of unusual interest. He said that in his experience puerperal eclampsia is the most formidable complication one has to contend with in the lying-in-room, and that it behooves every obstetric physician to be well prepared. He thought it could be prevented by appropriate treatment in the majority of instances, if one had control of the patient

from the beginning of pregnancy. Dr. H. C. Bagby, of Santa Maria, was elected to membership in the County Society.

PACIFIC SOCIETY OF RAILWAY SURGEONS.

The society was called to order by the president, Dr. W. B. Coffey, at the St. Francis Hotel, San Francisco, August 17th. The society, though not an old one, is in excellent condition, and reports a membership of 150. The meetings were well attended, and in every way successful. The subject of appendicitis, as usual, evoked a good deal of discussion and elicited diverse opinions regarding time of operation, drainage, etc.

CHILD STUDY CONGRESS.

The first International Congress on child study, home education and protection of children will be held at the Universal Exposition of Liege (Belgium) in September, 1905. All persons interested in education of children are invited to become members of that congress. They will receive full particulars in applying to the secretary, M. Pien, rue Rubens, 44, Brussels, Belgium.

At the same time they are invited to send to the Liege exhibition all documents, statistics, books, teaching materials, concerning child study, home education, education of the feeble-minded and protection of children that will be useful to the congress. For the universal exposition please apply to the Commissariat General du Gouvernement Belge, 65 rue Royale, Brussels, Belgium.

LANE MEDICAL LIBRARY.

It has been announced that Cooper College is to erect a building and establish a magnificent medical library in San Francisco, on the corner of Webster and Sacramento streets. This action is in accord with the wishes of Dr. Lane's widow. The library will be known as the Levi Cooper Lane Library of Medicine and Surgery. The requisite land has been purchased, and some \$200,000 are to be expended in putting up the building and adding to the library.

UNIVERSITY OF CALIFORNIA DENTAL DEPARTMENT.

Some time ago the president, Dr. Wheeler, appointed Dr. Harry P. Carlton dean of the Dental Department. Two new chairs in the faculty are announced: Dr. John A. Engs, of Oakland, professor of bacteriology and pathology; Dr. Alfred Schneider, San Francisco, professor of materia medica and therapeutics. A general reorganization has been effected, and some \$5,000 have been expended in new equipment.

Congress on Tuberculosis.—The International Congress on Tuberculosis will be held in St. Louis, October 3, 4 and 5, under the auspices of the World's Fair, as one of the international congresses. Clark Bell, Esq., editor of the *Medico-Legal Journal*, New York, is chairman of the executive committee. The Governors of the several States have been invited to name delegates to this important congress.

Kansas on Secret Remedies.—At the last meeting of the Kansas State Medical Society a resolution was introduced to the effect that all advertisements of secret remedies be excluded from the pages of its journal. The motion was referred to the Council, and in the published report of the meeting, *Journal of the Kansas State Medical Society*, July, there is no mention as to the action or report of the Council on the resolution. It is certainly to be hoped that the Council supported the resolution.

DEATHS.

Dr. Charles Everett Vaughan died at his residence in Santa Barbara on June 24th. Dr. Vaughan graduated at Harvard in 1863, and came to California in 1896, and had lived in Santa Barbara for some time. He was a member of the Santa Barbara County Medical Society.

Dr. Frank H. Payne, University avenue, Berkeley, died August 8th, aged 54 years. Dr. Payne graduated at Rush in 1874, coming almost at once to California. For twenty-seven years Dr. Payne had practiced continuously in the college town, going to Berkeley one year before it was incorporated, and was for several years the only physician in the place. During his residence he served for many years as Health Officer without pay. He was a member of his County Medical Society, a prominent Mason, and a member of the Bohemian Club of San Francisco.

THE NOSTRUM, THE FOE OF RATIONAL MEDICINE.

Dr. Harvey W. Wiley, in an interview in the *Druggists' Circular*, says:

"The foes of rational medicine at the present time are, first, the quack, a man possessing possibly high medical training and skill, but unfortunately devoid of those principles of ethics without which the honorable practice of a profession is impossible; second, the charlatan, a man necessarily devoid of any medical training or ability, who plays upon the feelings of his patients and administers nostrums of no value and applied with no science. The third foe of rational medicine is the impersonal physician, namely, the nostrum, the patent medicine and the proprietary remedy. It is appalling to think of the thousands and thousands of our fellow citizens who pin their faith to these alleged remedies. Some of them have value; they are, in fact, often the very remedies which are described in the *materia medica* and the *pharmacopœia* and administered by physicians, but distributed as they are, with absurd claims of efficiency, taken as they are without the advice or consent of a physician, they become not only one of the greatest foes of rational medicine, but one of the greatest dangers to the public at large."

This third foe of our profession—the nostrum—the "patent medicine"—the proprietary with the unknown formula—is one that so many of us are cherishing, excusing, using, promoting, prescribing and generally helping along in the sad work of undermining the medical profession. What is the actual difference, so far as the ethical and professional facts of the case are concerned, between Lydia Pinkham's Vegetable Compound or Hostetter's Stomach Bitters, and the following "proprietary," selected at random from the *ical Association*, *American Medicine*, and the *New York Medical Journal*: Antikamnia, arsenauo, antiphlogistine, pepto-mangan, Kutnow's powder, neurosine, unguentine, chlonia, Eskay's food, manola, marigol, lythol, urisepin, and our dear old friend—"California syrup of figs"?

THE POSTOFFICE AND FRAUDULENT MEDICINES.

The *Druggists' Circular* for July devotes considerable space to the subject of nostrums and the attitude of the Postoffice toward them; alcohol in nostrums, etc. An interview with the assistant attorney-general for the Postoffice is significant. We quote a portion of it:

"I should like to disabuse the public mind of the impression that the department has undertaken a campaign or crusade of any kind against anything or anybody. We have taken up individual cases as they have been presented to us, usually by persons who have complained that they had been defrauded

through the purchase of worthless remedies. As the law on the subject of the use of the mails for fraudulent purposes, either through newspaper advertising or circulars, is very clear and specific, we have in each case made a careful examination, and where analysis has shown the so-called medicines to be absolutely worthless we have issued fraud orders. During my own incumbency in office I have not paid special attention to the question of obscene advertising matter to which the department's published statement refers, although I believe my predecessor went into that phase of the subject very thoroughly. As a matter of fact, I think it will be found that where the advertising matter is of an objectionable character, the so-called remedies which are advertised are practically worthless, and therefore fraudulent; hence by issuing fraud orders against manufacturers or sellers of these goods we at the same time abolish their literature from the newspapers and from the mails."

STARVATION FEES IN ENGLAND.

An action at law tried within the last few days in the High Court of Justice throws a lurid light on the fierce struggle for life which is the lot of medical men practicing in the poor districts of London. It was stated in evidence that there are doctors who will give advice and medicine for twopence, if the patient calls on them; if the doctor has to visit the patient the charge is fivepence! Sixpence a visit with medicine thrown in is a comparatively high fee. There are doctors who will attend a patient at his own home and supply him with physic for an inclusive charge of three shillings and sixpence a week. And these are not starving young doctors who, like a man whom I knew, keep themselves alive through the winter by drinking codliver oil in their own dispensaries, but prosperous traders who drive about in carriages. It is likely enough that the advice and the physic in many cases are together not worth more than the twopence at which the vendor values them, but the wonder remains how a man can make a living on such a scale of fees. Can it be wondered at that the medical profession does not stand very high in public opinion when its own members rate their services so low?—*Medical News*.

"SCIENCE" OF OSTEOPATHY.

In April, 1902, the so-called "National School of Osteopathy" offered "Our full mail course in osteopathy, bound in five parts, examination papers and degree of D. O., for \$10, instead of \$25." The circular goes on to say:

"To compensate ourselves, however, for this reduction of price, we must withdraw the offer of the anatomic chart and books on anatomy and physiology which we offer to our \$25 students. However, as these latter works are not essential to your success as an osteopath, you will probably be much better pleased with this \$10 offer. There will be no further reduction in the cost of our course at any time. We do not find that any of our students are unable to pass our examinations, because our instruction is so plain."

And these are the people that some of our state legislatures are licensing, and for whom some of our noted writers appear before legislators to advocate the issuing of such licenses.

According to Dr. Hiss, of Chicago, the annual sale of "patent" medicines in the United States must reach the enormous sum of \$60,000,000, and a large portion of this does positive harm. It is stated that one of our smaller middle western cities alone turns out 21,000,000 barrels of patent medicines per year, and in France they even have slot machines for vending patent medicines.—Dr. O. T. Osborne, Address, A. M. A.

HYDROTHERAPY IN RHEUMATISM.*

By A. J. SANDERSON, M. D., San Francisco.

HYDROTHERAPY in some form has long been in general use in the treatment of rheumatism, but the practice is often empirical. The frequency of this disease, its various complications and important sequelae, together with the carelessness with which a large class of painful joint and muscular troubles are classed under the general head of rheumatism, and the common practice to treat all cases alike by means of an eliminating and depleting method, has led to the present consideration of a rational treatment of this affection.

It being customary for a large percentage of the patients suffering from rheumatism to visit some institution or mineral spring, I have sent the following list of questions to a number of these places, for the purpose of ascertaining the character of the work that is being done:

1. How many cases of chronic rheumatism are treated at your institution annually?
2. What method of treatment is mostly relied upon in the cure of these cases?
3. What percentage of the patients is sent away cured?
4. What percentage of the patients is sent away improved?
5. What percentage of the patients is incurable.
6. What class of rheumatic cases is found to be unimproved?
7. Are the cases that come in carefully classified?
8. Have you a physician at the springs who makes a careful study of the cases that come under your care?

The following statements are taken from the answers received:

Arroyo Grande Springs, San Luis Obispo County, Cal.—Treats a number of cases annually. No records kept. Claims to cure all cases. Have no physician. Cases not classified. Treatment employed, drinking mineral waters and baths. Water contains iron, magnesia, sodium and potassium salts. Temperature 100.5 degrees Fahrenheit.

Saratoga Springs, Lake County, Cal.—Treats a number of cases annually. No records kept. Cures a large proportion. Treatment consists of drinking mineral water and baths.

The Geysers, Sonoma County, Cal., report about 250 cases treated annually. Have had no resident physician. Cases not classified. Claim to cure 75 per cent. Treatment employed, geyser steam baths. These baths have steam impregnated with sulphur and other minerals, being piped from the geysers to the steam room.

Anderson Springs, Cal.—A few cases treated annually. All of them benefited. No resident physician, and cases not classified. Treatment employed, natural steam baths, hot sulphur baths, cold iron baths and massage.

Paraiso Springs, Cal.—About 250 cases treated annually. Claim 50 per cent cured, 40 per cent benefited and find 10 per cent of cases incurable. Incurable cases are those of years' standing, where joints are much enlarged. Cases not classified. Has resident physician most of the time. Treatment consists of hot soda baths, salt rubs, massage, blanket sweats, drinking large quantities of soda water.

Siegler Hot Springs, Lake County, Cal.—About 100 cases treated annually. Report 80 per cent cured, and 10 per cent found incurable. No resident physician, but one called when desired. Treatment consists of diet, drinking large quantities of hot iron water, hot baths at as high a temperature as can be borne. Springs vary from 90 to 136 degrees Fahrenheit. Also use blanket sweats and laxative water.

Harbin Hot Springs, Cal.—Treat about 150 cases annually. Claim to cure 90 per cent. Find about 2 per cent incurable. Incurable cases classified as having cardiac lesions. Cases not classified. Physician in attendance. Treatment consists of drinking the mineral water, hot baths, mud baths and massage. Potassium iodid and salicylates used in some cases.

Klamath Springs, Keswick, Siskiyou County, Cal.—This place is run as a summer resort. A number of cases of rheumatism treated annually. Nearly all benefited. Have no resident physician, and cases not classified. Treatment employed, hot mud baths, tepid shower baths and rest.

Allen Springs, Lake County, Cal.—Quite a large number treated annually. Gives history of a number of cases that have made remarkable recoveries. Nearly all cases benefited. Has no resident physician. Cases not classified. Treatment consists of drinking mineral water in connection with cold creek bathing.

Bartlett Springs, Cal.—This institution has about 2,000 guests annually, mostly kidney and liver troubles. But a small proportion are rheumatism. Nearly all these are benefited. There is a resident physician, but patients generally decline to consult a physician. The cases are classified. Treatment employed, drinking freely of the water, and hot soda magnesia baths.

Paso Robles Springs, Cal.—Eight hundred to 1,000 treated annually. Sixty to 75 per cent cured. Very small percentage not improved. Has resident physician, and cases are carefully classified. Treatment consists of drinking the different waters, hot sulphur baths, mud baths, sweats and massage.

Byron Hot Springs, Cal.—About 50 cases treated annually, and 4 per cent found incurable. Other cases benefited, but few remain long enough for perfect recovery. Has resident physician, and cases are carefully classified. Treatment employed, general tonic treatment used of arsenic and strychnin, potassium iodid, though acetyl salicylic acid is the principal drug; nourishing food and diuretic mineral waters, mud baths and hot mineral baths, according to the strength of the patient. Dr. Crees has only reported the cases that have been treated as hospital patients. No account has been made of those who came to make use of the water and baths for their rheumatic complaints. In fact, the doctor thinks that but few of these are true rheumatism.

Sanitarium, Battle Creek, Mich.—Treats 100 cases annually. Has regular physician in charge. Cases carefully classified. Treatment employed, electric light baths followed by cold baths, massage, manual Swedish movements, radiant heat to joints, followed by heating compress, anti-uric acid diet, sun baths, general application of the actinic ray. When there is neither flexion of the joint nor serious deformities, cure may be anticipated in all cases. In cases in which there is flexion of the joint and serious deformity, patients can only be improved.

A glance at these reports will show that in the majority of instances all cases are classed together and treated alike. Usually no records are kept, and more often the patient directs his own treatment. The results, consequently, are not satisfactory as to the full benefits that might be obtained at these springs, or as to the real merits of the treatment employed. It only emphasizes the importance of more accurate, scientific work being done in the treatment of this important disease. People need to be taught that chronic or recurrent rheumatism is a serious affection which is likely to lead to permanent disablement, and that it should be taken hold of and treated in an intelligent manner. Before a line of treatment can be mapped out for rheumatism, a careful diagnosis should be made. Rheumatoid arthritis, arthritis deformans, neuritis, neuralgia,

*Read at the Thirty-fourth Annual Meeting of the State Society, Paso Robles, April 19-21, 1904.

various systemic diseases of the cord in their initial stages and simple inflamed conditions of the joints should be recognized, eliminated and treated as indicated.

The real cases of rheumatism need to be individualized. There is an individuality in disease as well as in persons. The individual needs to be understood before he can be properly handled. Hydrotherapy, which will affect one individual favorably, may have a very unfavorable influence on another person suffering from the same conditions. Accuracy should be exercised in giving the treatment that has been carefully prescribed. Prolonged, careless bathing should be avoided. The applications should be precise, decided and given with dispatch. Undue exposure should be avoided, and the room should be well ventilated, warm and dry. In connection with treatment, a proper diet should be instituted. The indications are for one that will be freed from uric acid forming material, and one that will best agree with the peculiar conditions of the digestive organs and alimentary canal and most effectually nourish the patient. The indications to be met in treatment are the elimination in the most economical way of the toxic rheumatic material from the system, the establishment of a normal metabolism and insuring the normal tone and resistance of the tissues.

The elimination of the rheumatic material and other toxins from the system is to be accomplished by free water drinking and hot applications. The patient should drink not less than from four to eight pints of water daily. After a few treatments he will perspire freely. Hot applications may be in the form of hot blanket packs, fomentations to the affected joints while the patient is covered with a warm blanket, the hot full bath, the mud bath, the hot air bath or the electric light bath. These baths in many cases can be followed by dry blanket sweats. The special form to be selected for each case is a matter of the special requirements of the patient and appliances at hand. The imperative need is that whatever treatment is used it should be hot; that free perspiration be invoked; that the extent of the treatment be adapted to the strength and vitality of the patient; also, that a proper after-treatment be employed. This after-treatment should be a cold application, one that is decisive, and one that will bring about a reaction which will be felt by the patient and adapted to his condition. Severe cold applications cannot be borne in acute cases, and in all cases the measure of the shock should be carefully regulated, and always followed by the desired reaction. Ten degrees fall of temperature with some patients means as much as 60 degrees to others. Mild measures can be used at first in doubtful cases, and at each succeeding treatment lower the temperature one or two degrees until a favorable minimum temperature is reached. The reaction is the most important part of the cure. The eliminative process alone may prove effective, where the patient is robust, the rheumatic diathesis has not become established and the alimentary canal is in a good condition. But where any two of these conditions are lacking, the recovery without some tonic influence to support the system and re-establish internal resistance is doubtful. Hydrotherapy fully meets the requirements of this tonic action. In nearly all cases after the hot treatment some cold application should be immediately given. One of the mildest methods is the use of cold friction. With mitts, made of coarse Turkish cloth, on the hands, dipping them in cold water at a temperature adapted to the case, varying from 75 to 50 degrees Fahrenheit, and with only a small portion of the body exposed, making rapid friction until perspiration is checked and a reaction is brought about, as indicated by a red skin and feeling of warmth by the patient; continue the treatment until the whole body is treated. A little more severe measure is a cold towel rub. A fair-sized Turkish towel is wrung

moderately dry out of cold water, unfolded and placed quickly over the surface of the body. Rapid friction is then made until reaction is established. A still more radical measure may be obtained by the cold douche, to be used only in sub-acute and chronic cases. It is my practice, when a patient is taken from the sweat bath, to first place him under a douche at a temperature of 110 or 115 degrees for one or two minutes, and then instantly turn on the cold douche for fifteen to thirty seconds at a temperature as cold as the patient can react from, varying from 80 to 60 degrees. The patient is dried thoroughly and quickly, and if any of the symptoms of the disease are acute, as may be indicated by the presence of fever, he is placed in a warm bed. In chronic cases where there is no fever, the treatment is followed by massage and exercise.

In some cases massage to the joints cannot be taken with favorable results till some time after all acute symptoms are passed, though massage to muscles as practiced by Professor Max Schuller will be effective. In acute and sub-acute cases where the joints are painful and swollen, compresses should be continuously applied between the hot applications. A soft cotton cloth wrung out of water at 60 degrees is wrapped around the joints and snugly covered with a flannel of three or four thicknesses. The compress is changed whenever it becomes heated by the feverishness of the part. This compress often proves very efficient. Dr. Baruch reports that since introducing this method in the J. Wood Wright Memorial Hospital the duration of the treatment of his patient has been diminished from 20 to 35 per cent.

The form of hot treatment that is to be used should be selected with care. In acute cases the fomentation or pack is best. It can be given in the room, either on the bed or on a cot. The hot air baths have some advantages for the chronic cases. The dryness of the atmosphere and the extent of heat that can be obtained has a favorable influence on metabolism and tissue change. With this bath the internal temperature is raised, materially favoring oxidation and elimination. In observing temperature of patients taking treatment in the Riverside Dispensary in New York, I found that it would raise from one to four degrees during a hot air bath of fifteen to twenty minutes. This rise would rapidly fall with the cold douche which followed, and would again become normal after a half hour's rest. The electric light bath has advantages over the other forms of dry heat. The light rays are more penetrating, being communicated by radiation rather than conduction. The patient perspires at a very much lower temperature, and the bath can be borne by the patient with less depressing results. In chronic cases with large and painful joints, Dr. Schuller uses the Scotch douche, which consists of a rapidly alternating hot and cold stream poured against the affected joint with varying pressure. The mechanical effect, as well as the stimulus of the hot and cold, favors absorption and relieves the pain and soreness.

DISCUSSION.

Dr. E. H. Woolsey, Oakland.—The treatment advised in this paper is very applicable in our southern climates, because we readily perspire and do not eliminate the poisons taken in. Not enough stress was given to the diet. That is one of the main things in the treatment of rheumatism. I know this as a fact, because I have lived experimentally and professionally for sixty years; I have treated rheumatism and have had rheumatism. We all know that rheumatism can be got rid of by going to the mountains or warm climates, by fishing or hunting. I believe that fresh air, taking exercise and baths is the best of all methods for treating rheumatism. Behind that is the question of diet. A man who eats meat is putting rheumatism into himself just as fast as he can. Again, a man who takes meat and is able to

eliminate enough to keep himself free from rheumatism by taking a little acid is less apt to suffer. Cut out the meat. From my personal experience the man who lives on a vegetable diet will not have rheumatism.

Dr. Robert Cress, Bartlett Springs.—It seems to me that the term rheumatism is not always used correctly. Rheumatism to-day means a condition to which we can apply no other name. It may be sciatica, neuralgia or neuritis; and still further, gout is confused with rheumatism. Dr. Woolsey has given us in his discussion a pretty good description of gouty conditions, but he calls it rheumatism. What is a true rheumatic condition? As to the diet, that is a point which should have careful consideration. The laity consider that all forms should be treated by restricted albuminous diet. Take a case of acute articular rheumatism; there is no disease which will destroy tissue so fast as that, not even typhoid. When a patient is convalescing from such a disease as that think how serious it is to restrict that individual's diet. He requires nourishment. I am guided rather by the physical condition than by the name of the disease. If the vitality is low, I feed these patients upon a meat diet.

Dr. G. H. Evans, San Francisco.—Regarding the amount of exercise, we must remember in these cases the possible heart lesions. I recall a patient of mine who came to this hotel less than two years ago. He had what he thought was rheumatism, and had come down here, and, without an examination of his heart by the physician of the hotel, was taking these hot mud baths. I found the man with a dilated heart, and immediately stopped the baths. The number of cardiac lesions, and the care with which these cases should be examined, are important facts.

Dr. A. J. Sanderson, San Francisco.—In writing this paper I avoided any discussion of the cause of rheumatism purposely. Whether it is caused by uric acid or by some toxin in the system are different opinions. The question of diet is very important. The Japanese, it is noticed, very seldom have rheumatism. One reason is because they live on a vegetarian diet. I believe in vegetarian diet. In regard to the hot baths, while they are so very hot they also act as a stimulant. The great trouble is the prolonged warm baths give no decided reaction. They weaken the patient, and may help develop the heart lesions. I emphasize the cold treatment because I think it has advantages. When regulated according to the strength of the patient, it is more effective than ordinary methods.

TOTAL LARYNGECTOMY FOR EPITHELIOMA. EMPLOYMENT OF THE GLUCK PHONATION APPARATUS.

By WALLACE I. TERRY, M. D., San Francisco.

THIS patient, M. K., aged 42, came under my care in the service of Dr. T. W. Huntington, at the City and County Hospital, last May, during the absence of Dr. Huntington in the East. He was referred to me by Dr. Geo. H. Powers, who had had the patient under observation and treatment for a month previous and had made the diagnosis of probable epithelioma of the larynx.

May 7th of this year I did a laryngotomy under local cocaine anesthesia and removed all the tumor masses visible, including the vocal cords. A microscopical examination confirmed the diagnosis of epithelioma.

August 31st the patient re-entered the City and County Hospital, complaining of marked dyspnea. A laryngoscopic examination at that time showed a marked stenosis of the upper portion of the larynx. No tumor masses could be seen. There was an abscess cavity to the left of the larynx following infection from the first operation. On that day I again did a laryngot-

omy under local anesthesia and removed a number of small tumors from the upper and middle portions of the larynx and dissected away the cicatricial bands which encroached on the lumen of the larynx. Microscopical examination of the tumors again showed epithelioma. The laryngeal wound was left open. Nine days later the patient was subjected to X-ray treatment through the open wound in the larynx, but it was discontinued after nine treatments, which were without apparent benefit, as the obstruction in the larynx kept increasing and made necessary the insertion of a tracheotomy tube in the larynx.

September 22, 1903. Three weeks after the second operation I removed the entire larynx, following quite closely the technic as elaborated by Keen of Philadelphia. A median incision was made from above the hyoid bone to a point $1\frac{1}{2}$ inches above the sternum. The trachea was dissected free, necessitating division of the isthmus of the thyroid. The trachea was divided across between the third and fourth rings, and the lower portion drawn forwards and downwards and attached to the skin by a number of catgut sutures. A tracheotomy tube was then inserted and the anesthetic continued through it. With the patient in the Trendelenburg position the larynx was dissected free; a rather difficult procedure in this case, owing to many adhesions resultant from the previous operations, and especially the infection. An abscess cavity was found extending along the left cornu of the hyoid bone. The epiglottis was dissected out separately, except a small portion of the tip, which was unintentionally left. The mucous membrane of the pharynx was next sutured together with catgut and a few sutures employed to bring together the muscles of the pharynx. The hemorrhage was not severe and was mostly from the thyroid isthmus. The greater part of the wound was closed with silkworm gut with a cigarette drain in the abscess cavity along the hyoid. The tube in the trachea was removed and an open-ended pill-box covered with moist warm gauze placed over the trachea. Chloroform was the anesthetic used. The anethetists' record of blood pressure and pulse showed no marked shock during the operation, but for a couple of hours after the operation, with the patient still in the Trendelenburg position, the pulse was almost imperceptible and the respirations were reduced to four per minute. Oxygen and stimulants were administered and had the desired effect.

The suggestion of Crile to apply cocaine to the interior of the larynx as a preventive of laryngeal shock seems to me a good one, and in another case I should use it. Two days after the operation the patient was allowed to drink sterile water. Four days later patient was up and around, and could eat soft food. Since then the patient has gained in weight, twenty pounds to date, and the wound in the neck has closed almost entirely.

A short time ago, at the suggestion of Dr. Newman, I made an artificial larynx after Gluck's model, and the patient is rapidly learning to speak. Gluck inserted the tube into the nose instead of the mouth, but it seems to me an objectionable procedure, as one would view such an apparatus with a certain amount of repugnance; furthermore, the patient would have to become accustomed to the presence of a tube in the nose as far back as the posterior wall of the pharynx.

There are two points about this case which have occurred to me since the operation. In the first place I should have urged a total laryngectomy on the patient as soon as the microscopical diagnosis was made after the first laryngotomy. By

so doing the chances of ultimate recovery would have been much heightened, and there would have been a cleaner operative field, permitting a complete closure of the wound. Keen obtained primary healing throughout in his case. Second, the suggestion of Crile, of which mention has already been made.

The latest statistics which I have been able to see in regard to total laryngectomy are those of Delavan of New York, as given in the *New York Medical Journal*, September 15, 1900, p. 449. He tabulates thirty-four cases operated upon by six surgeons: Recurrence, 35 per cent.; relative cure (less than three years), 32 per cent.; definitive cure (three years or more), 6 per cent.; operative deaths, 26 per cent.

DR. MURPHY'S SUGGESTION.

In the discussion of Dr. Claire W. Murphy's paper on "Surgical Anatomy of the Inguinal Canal," page 162 of the *May Journal*, occurs the following sentence: "It is well to enter the inguinal space from above, as suggested by Dr. Wills." This is an error, for the suggestion was presented by Dr. Murphy, and Dr. Wills referred to it in his discussion.


THE PRESIDIO GENERAL HOSPITAL.

Colonel Girard, in the *Journal of the Association of Military Surgeons*, has an excellent and exhaustive report of the Army General Hospital at the Presidio. The Nosological Index of Diseases treated at the hospital from July, 1899, to July, 1902, should be of much interest to one gathering statistics.

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